

**CIHM
Microfiche
Series
(Monographs)**

**ICMH
Collection de
microfiches
(monographies)**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1995

Technical and Bibliographic Notes / Notes technique et bibliographiques

The institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modifications dans la méthode normale de filmage sont indiqués ci-dessous.

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><input checked="" type="checkbox"/> Coloured covers /
Couverture de couleur</p> <p><input type="checkbox"/> Covers damaged /
Couverture endommagée</p> <p><input type="checkbox"/> Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée</p> <p><input type="checkbox"/> Cover title missing / Le titre de couverture manque</p> <p><input type="checkbox"/> Coloured maps / Cartes géographiques en couleur</p> <p><input type="checkbox"/> Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)</p> <p><input type="checkbox"/> Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur</p> <p><input type="checkbox"/> Bound with other material /
Relié avec d'autres documents</p> <p><input type="checkbox"/> Only edition available /
Seule édition disponible</p> <p><input type="checkbox"/> Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de
la marge intérieure.</p> <p><input type="checkbox"/> Blank leaves added during restorations may appear
within the text. Whenever possible, these have
been omitted from filming / Il se peut que certaines
pages blanches ajoutées lors d'une restauration
apparaissent dans le texte, mais, lorsque cela était
possible, ces pages n'ont pas été filmées.</p> <p><input checked="" type="checkbox"/> Additional comments /
Commentaires supplémentaires: This copy is a photoreproduction.</p> | <p><input type="checkbox"/> Coloured pages / Pages de couleur</p> <p><input type="checkbox"/> Pages damaged / Pages endommagées</p> <p><input type="checkbox"/> Pages restored and/or laminated /
Pages restaurées et/ou pelliculées</p> <p><input type="checkbox"/> Pages discoloured, stained or foxed /
Pages décolorées, tachetées ou piquées</p> <p><input type="checkbox"/> Pages detached / Pages détachées</p> <p><input type="checkbox"/> Showthrough / Transparence</p> <p><input type="checkbox"/> Quality of print varies /
Qualité inégale de l'impression</p> <p><input type="checkbox"/> Includes supplementary material /
Comprend du matériel supplémentaire</p> <p><input type="checkbox"/> Pages wholly or partially obscured by errata
slips, tissues, etc., have been refilmed to
ensure the best possible image / Les pages
totalement ou partiellement obscurcies par un
feuillet d'errata, une pelure, etc., ont été filmées
à nouveau de façon à obtenir la meilleure
image possible.</p> <p><input type="checkbox"/> Opposing pages with varying colouration or
discolourations are filmed twice to ensure the
best possible image / Les pages s'opposant
ayant des colorations variables ou des décol-
orations sont filmées deux fois afin d'obtenir la
meilleure image possible.</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

	10X		14X		18X		22X		26X		30X
									✓		
	12X		16X		20X		24X		28X		32X

The copy filmed here has been reproduced thanks to the generosity of:

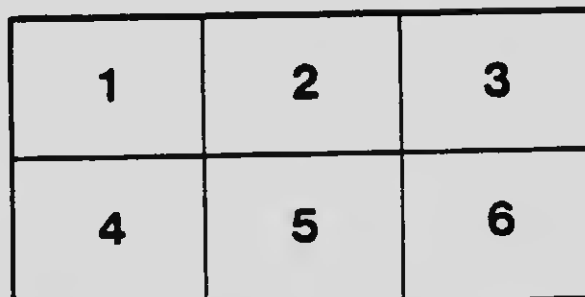
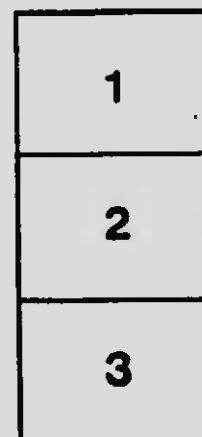
National Library of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shell contains the symbol \rightarrow (meaning "CONTINUED"), or the symbol ∇ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

Bibliothèque nationale du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

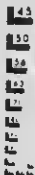
Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier feuillet et en terminant soit par le dernier feuillet qui comporte une empreinte d'impression ou d'illustration, soit par le second feuillet, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par le premier feuillet qui comporte une empreinte d'impression ou d'illustration et en terminant par le dernier feuillet qui comporte une telle empreinte.

Un des symboles suivants apparaît sur la dernière image de chaque microfiche, selon le cas: le symbole \rightarrow signifie "A SUIVRE", le symbole ∇ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)



APPLIED IMAGE Inc

1653 East Main Street
Rochester, New York 14609 USA
(716) 482-0300 - Phone
(716) 288-5989 - Fax

REPORT

OF
DR. ADAM SHORTT

Commissioner of Investigation

The Economic Conditions
and Operations

OF

The British Columbia Electric
Railway Company and
Subsidiary Companies

and to decide definitely as to the possi-
bility of street car service being main-
tained in competition with the jitneys.

NOVEMBER 3, 1921

21

REPORT

OF

DR. ADAM SHORTT

Commissioner Investigating

The Economic Conditions
and Operations

OF

The British Columbia Electric
Railway Company *and*
Subsidiary Companies

and to decide definitely as to the possi-
bility of street car service being main-
tained in competition with the jitneys.

NOVEMBER 5, 1917

W 6 16

REPORT

OF

DR. ADAM SHORTT

Commissioner Investigating

The Economic Conditions
and Operations

OF

The British Columbia Electric
Railway Company *and*
Subsidiary Companies

and to decide definitely as to the possi-
bility of street car service being main-
tained in competition with the jitneys.

NOVEMBER 5, 1917

CA.

1-

2'

17A01

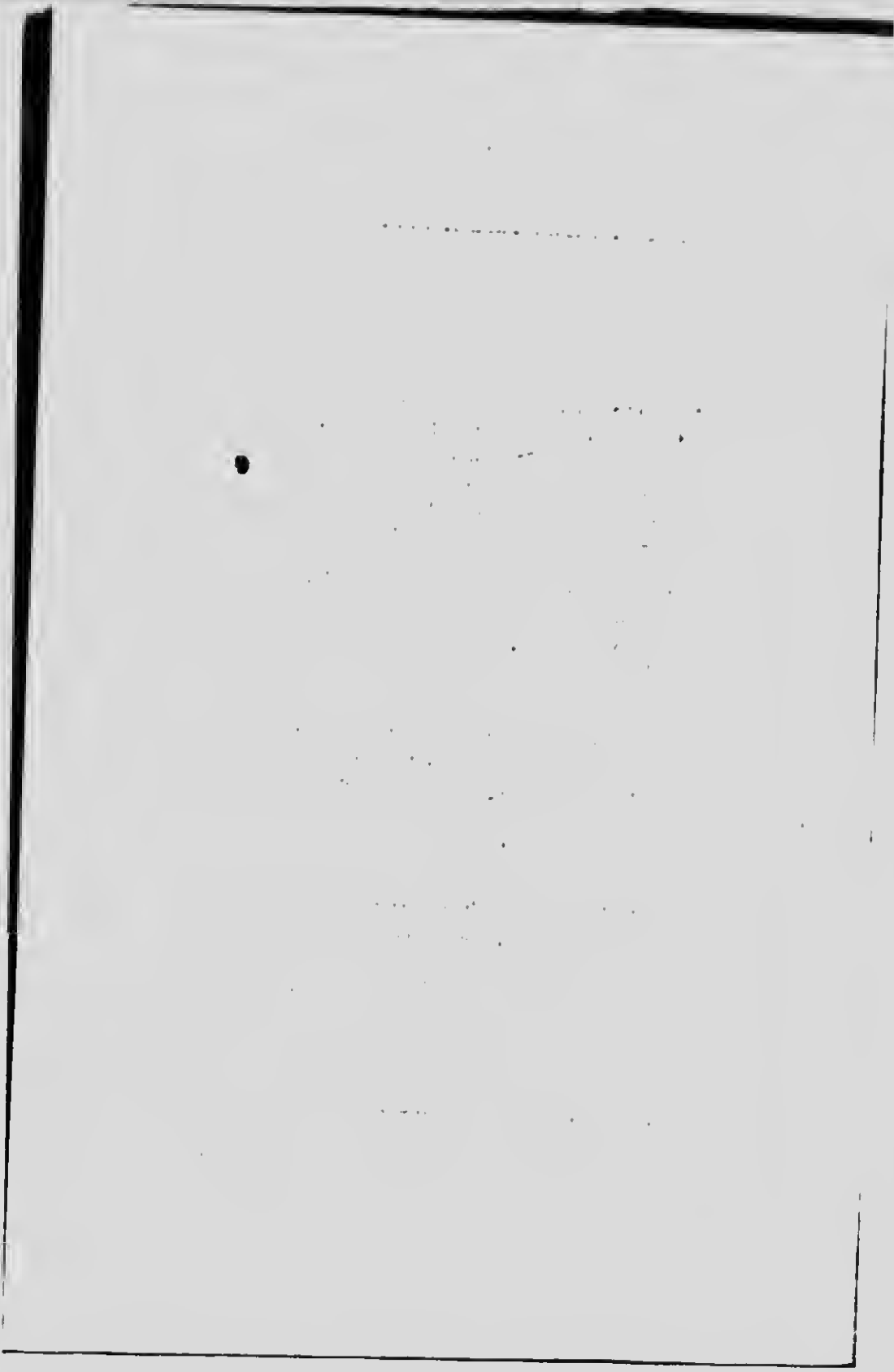
0.2

THIS report has been published in full by the B. C. Electric Railway Company in order that the public may be fully informed upon the conditions affecting their transportation and light and power system, as reported upon by Dr. Adam Shortt.

¶ In presenting this report to the public, the Company makes no comments, and is actuated solely by the desire to place all the facts with regard to its system before the communities it serves.

¶ The public has a right as well as a duty to know and understand its public utilities, and we are taking this opportunity of placing the whole report before them in the hope that it will receive the consideration it deserves.

B. C. ELECTRIC RAILWAY COMPANY,
GEORGE KIDD, *General Manager.*



The Economic Conditions and Operations

OF

The British Columbia Electric Railway Company *and* Subsidiary Companies

REPORT

BY

DR. ADAM SHORTT

Commissioner

THE street railway employees of Vancouver went out on strike on June 13, 1917, as the result of the refusal of the demand for higher wages, which the Company offered to meet to the extent of \$100,000 a year. The strike lasted seven and one-half days in Victoria and eight and one-half days in Vancouver.

¶ Following a meeting of representative citizens called with the object of reinstating the car service, negotiations were opened by the City Council of Vancouver with the Company, when the Company stated that it was impossible for it to pay the wages asked by the employees and at the same time compete with the jitneys.

¶ It was decided at this meeting that the Company would pay the wages asked for by the men and reinstate the car service, and that both the City and the Company would agree to abide by the decision of a Commissioner to be appointed by the Provincial Government to enquire into the economic and operating conditions of the B. C. Electric. An Order-in-council was subsequently passed by the Provincial Government appointing Dr. Adam Shortt, of Ottawa, sole Commissioner, who held sessions in Vancouver and Victoria from July 16 to August 21, 1917, and subsequently reported as follows.

Ottawa, November 5, 1917.

HON. H. C. BREWSTER,
Prime Minister of British Columbia,
Victoria, B. C.

DEAR SIR,—In accordance with the requirements of the commission issued by order of the Lieutenant-Governor-in-Council of British Columbia, of date July 11, 1917, appointing me a Commissioner under the provisions of the Public Inquiries Act for the purpose of making a full investigation of the economic conditions and operations of the British Columbia Electric Railway Company and subsidiary companies and of reporting the facts found, with such recommendations as might be suggested as the result of such inquiry, I have the honor to submit the accompanying report, with the detailed returns required and the evidence and arguments submitted and a summary of the proceedings before the Commission.

In accordance also with the resolution passed by the Vancouver City Council of the 10th of June, 1917, and concurred in by the British Columbia Electric Railway Company, requesting the Lieutenant-Governor-in-Council to appoint a Commission to thoroughly investigate the question of transportation in the City of Vancouver and surrounding districts and to decide definitely as to the possibility of the street car service being maintained in competition with the jitneys, and this resolution of the said Council having been made "on the understanding that the British Columbia Electric Railway Company and the City Council will abide by the decision arrived at by the Commission," there is given in the findings and recommendations at the close of the report a special decision on this subject.

All of which is respectfully submitted.

Yours sincerely,

(Signed) ADAM SHORTT,
Commissioner.

I. THE B. C. ELECTRIC SYSTEM

EXTENT, COMPOSITION AND FACTORS IN ITS CREATION

In this section, Dr. Shortt deals with the financial affairs of the Company, the grouping of the various utility properties, and the conditions which brought them into being. The underlying factors in community growth and their dependence upon a unified system of transportation are also detailed by the Commissioner. (Page 10.)

THE British Columbia Electric Railway Company is an English company, formed in 1897, with its head office in London, incorporated under English company law and registered at Somerset House. The Company does business in British Columbia under a very broad license from the Provincial Government, dated January 3, 1898. The power of attorney (Exhibit 40) given to the General Manager in British Columbia, Mr. George Kidd, shows that the Canadian management is fully authorized to deal with all matters necessary to the efficient control and administration of all branches of the public utilities owned and operated by the Company in British Columbia.

Owing to the fact that the British Columbia Electric Railway Company acquired by purchase certain original street car and gas companies in Vancouver and Victoria operating under provincial charters, the Company holds these properties subject to the provincial charters. For the further convenience of having the power and light utilities conform to the requirements of provincial law, subsidiary companies whose stock is fully owned by the British Columbia Electric Railway Company were formed to operate the power and light plants on the Mainland and Vancouver Island. Thus the Vancouver Power Company and the Vancouver Island Power Company are subsidiary companies of the Electric Railway Company. The British Columbia Electric Railway Company either directly or through subsidiary companies owns and operates the

urban, suburban and interurban electric railway systems on the mainland in the cities of Vancouver and New Westminster, the city and district of North Vancouver and the municipalities of Point Grey, South Vancouver and Burnaby, as also the line running through various rural districts and municipalities between New Westminster and Chilliwack. On the Island of Vancouver it owns and operates the electric railway serving the city of Victoria and the adjoining municipalities of Esquimalt and Oak Bay and the interurban line from Victoria through the Saanich Peninsula to Deep Water Cove.

Through its ownership of the stock of the Vancouver and Victoria gas companies it supplies gas to these cities, and through its ownership of the Vancouver Power Company and the Vancouver Island Power Company it supplies the majority of the electric light and power to the municipalities and districts already mentioned, on the mainland and the island. The only other company supplying electrical power in a commercial way is the Western Canada Power Company, which, however, does not operate in the retail field of domestic light and power.

The total capital investment of the British Columbia Electric Railway Company and the properties in which it is invested are shown in the consolidated balance sheet of the Company (Exhibit 5) as of date the 30th June, 1916, that being the close of the last fiscal year for which financial statements are available. This balance sheet shows that the stock of

the Company is divided into three equal portions of £1,440,000, or \$6,984,000. The first portion is the 5 per cent. cumulative preference stock, the second the preferred ordinary stock and the third the deferred ordinary stock, the total stock amounting to \$20,952,000. The capital raised through bond or debenture issues amounts to \$22,353,469, made up as follows:

First mortgage 4½ de-	
bentures	\$ 1,049,540
Vancouver Power 4½	
debentures	491,305
Perpetual consolidated	
4½ debenture stock . .	13,522,624
Perpetual guaranteed	
4½ debenture stock . .	7,290,000

The original capital of the Company is thus about equally divided between share capital and debenture stock, corresponding in substance to what are known in this country as shares and bonds.

None of these capital issues were made at a discount. On the contrary some of them were issued at a premium. Enquiry by cable to London elicited the information that the stocks and debentures had realized on the whole a premium of £246,213, or nearly one and a quarter million dollars. In addition to the capital obtained from the sale of shares and debentures, amounting to over \$44,500,000, during the more prosperous years of the Company a reserve fund of \$3,062,988 was accumulated from the earnings of the Company. There was set aside also for the renewals maintenance fund \$5,154,428, and an accident reserve fund of \$332,849 was also accumulated. As representing these reserve funds the Company has on hand in the shape of cash in hand, short loans and marketable securities \$3,739,669, while the remainder, amounting to \$4,810,396, is invested in the ordinary assets of the Company. Adding these to the \$44,500,000 received on the sale of the original capital securities, the Company has nearly \$50,000,000 of

actual capital invested in the enterprises of the Company apart from its more or less liquid reserves.

When we turn to the actual investments of the Company we find from the consolidated balance sheet that the property, plant, etc., of the various undertakings are set down under the head of "Property, Plant, etc.," at the sums which they actually cost the Company, and amount altogether to \$47,292,277. The detailed schedule of this property, plant, etc., gives the cost of the chief factors in the total holdings of the Company (see Exhibit 5-A). The constituent elements are as follows: The hydroelectric plants at Coquitlam-Buntzen, Gold Stream and Jordan River cost \$11,774,173. The auxiliary steam plants at Vancouver and Brentwood Bay cost \$1,860,609. The electric sub-station and transmission lines furnishing current for local distribution, but not including the distribution system itself, cost \$4,286,161, while the capital cost of the distribution system for light and power from the sub-stations amounts to \$4,152,522. The chief items of the electric railway system are divided as between the street railway and the interurban systems. Under "Street Railways" come the cost of track and overhead work, \$4,577,431, and rolling stock, \$2,864,802. For the interurban systems the track and overhead work cost \$4,715,197 and the rolling stock \$2,059,704. Private right of way for the interurban system cost \$842,953. Other items which are partly chargeable to the hydroelectric system and partly to the transportation system are the following: Machinery and tools in car shops, etc., \$63,145; furniture and fixtures, fire boxes and loose plant, \$634,838; buildings, including car barns, stores, etc., \$1,129,899; head office and terminal buildings and sites, \$1,165,143; wharves, bridges and towers, \$390,117. There are also gas plants in Vancouver and Victoria amounting to \$2,610,601. The above

properties, whatever may be said as to their present value as compared with their original cost, are undoubtedly essential factors in the supply of such public utilities as transportation, power, light and heat, and the necessary capital expenditure involved furnishes a proper basis on which a reasonable return of profit may be calculated.

**CAPITAL USED FOR PUBLIC UTILITIES
IS SEGREGATED**

Certain other capital expenditures, however, are included in the total of \$47,232,277, which, whatever may be their ultimate value to the Company, either as separate investments or for subsequent use in connection with its plant, yet under present conditions cannot be accepted as part of the capital employed in the service of the public and therefore as a basis for reasonable profits. Among these items are certain undeveloped water powers at the Jones and Chilliwack lakes, obtained at a cost of \$382,811 and which had been secured in view of possible future demands for hydro-electric power. Obviously until these properties are developed they cannot be made the basis for a payment of profits. Of a similar nature are the properties at Hastings Townsite and Eburne, purchased for prospective gas works at a cost of \$619,543; the Vancouver station site, costing \$147,304; the lands adjoining various rights of way, \$211,003, and other lands which are held for sale, obtained at a cost of \$620,744.

The Royal City Mills property, purchased for freight yards, is now partly used and partly leased for shipbuilding purposes. The cost of the whole amounted to \$631,026. Half of this may be fairly included in the capital required for the service of the public. Finally, there is an item of \$1,488,538, which is stated as representing expenditure unallocated when the properties of the previous companies were purchased in 1897, and which was probably taken to

represent the natural increment in value of these properties since their original purchase, when Vancouver and Victoria were much smaller centres than at present and values much lower. Other parts of the property taken over, however, are doubtless worth much less than their original cost. At the present time, when values are so uncertain, and in default of more detailed information than the records can furnish, it will not be unfair to allow the increases and decreases in value to offset each other, and to treat this sum as not to be included in the property of the Company. The total of the capital items, therefore, which cannot be accepted as a fair basis for the estimate of dividends, will amount to \$3,785,460. This reduces the total of the item for property, plant, etc., from \$47,232,277 to \$43,446,816. This, then, may be taken as the actual capital investment of the Company in its various public utilities of electric power, light and transportation and gas, and the returns from which may be legitimately expected to furnish a reasonable dividend after meeting the fixed charges for all debenture capital and paying the legitimate costs of operation. As will be shown below, the Company has certain obligations to meet with reference to leased lines, extra power obtained from the Western Canada Power Company, the percentage of gross earnings payable to the City of Vancouver, all of which will have to be taken into account in arriving at the net earnings of the Company.

As already indicated, the other investments of the Company, whether in the stocks and bonds of other corporations or in real estate for sale or for prospective expansion of the Company's plant, cannot be regarded as legitimately affecting the rights and obligations of the Company with reference to the services rendered to the public, the rates charged for these, and the earnings which they

supply to the treasury of the Company.

The areas served by the Company group themselves naturally into two main divisions: (1) that centering in the City of Vancouver, on the mainland, and (2) that centering in the City of Victoria, on the Island of Vancouver. The mainland area again, while all supplied with light and power from one chief plant, the Coquitlam-Buntzen system, and while the transportation system virtually centres in Vancouver, yet may be subdivided as regards transportation and the distribution of power and light into certain distinguishable areas, which may be defined as (1) the city area of Vancouver and its immediate suburbs in Point Grey, South Vancouver and Burnaby, and which may be named the Vancouver district; (2) the interurban system, including the three interurban lines to New Westminster, one of which also serves Lula Island, and the more extensive line through the eastern Fraser Valley from New Westminster to Chilliwack; and (3) the city and district of North Vancouver, which, while separated from Vancouver City by Burrard Inlet, including Vancouver Harbor, is nevertheless closely connected with the City of Vancouver as regards its residential, economic and other transportation interests. On the Island of Vancouver the Victoria district may be treated as a unit, although it includes in addition to the city area of Victoria itself the suburban municipalities of Oak Bay and Esquimalt and the adjoining rural area of the Saanich Peninsula.

INTERCOURSE BETWEEN MUNICIPALITIES AND CITY ESSENTIAL

Taking the mainland system first, the most essential fact to be recognized is that though the City of Vancouver and the circle of municipalities which adjoin it are separate and independent corporations, yet in point of economic and social relations the citizens of these municipal areas

constitute in reality one single and interdependent centre of population and business. Were the constant intercourse between the various parts of this common social and business area interrupted or substantially impaired, the most serious consequences would immediately result.

Less than a century ago, chiefly for lack of constant intercourse through convenient and permanent means of communication, most municipalities were more or less completely independent units, trading with each other and the outside world on the basis of external exchange. Within a few decades past all this has been changed, mainly through the services which are now supplied by such corporations as the British Columbia Electric. In the district of Vancouver, as elsewhere, thousands of citizens reside in one municipality while earning their living in another. Thousands of others depend for a large part of their income upon the sale of goods and services to the citizens of adjoining municipalities, while in their turn depending upon the supplies and services of other citizens in other parts of the same circle of municipalities. Again, hundreds of citizens of one or other of these municipalities live entirely by maintaining the means of intercourse and distribution between them. It is impossible, therefore, for any of these municipal corporations, and more particularly for the City of Vancouver itself, to treat the essential elements of intercommunication between them as matters in which they are not vitally interested, financially and otherwise. The mere fact, therefore, that the legal relations of the municipality of Vancouver City to the British Columbia Electric Railway Company are specified in a charter which ignores the wider relations and obligations of each and the wider areas beyond the arbitrary and accidental limits prescribed for the city, cannot justify either or both in ignoring in point of fact or in practice

the actual unity of the larger area of population and economic interest. Moreover, the more intelligent and far-sighted citizens of this civic centre should not permit the temporary corporate interests or jealousies of the present municipal subdivisions to jeopardize their own larger vital interests, or those of the Province of British Columbia, the Dominion of Canada, or the British Empire.

It appears that a substantial recognition of these fundamental considerations was expressed by a former municipal government of Vancouver City. Towards the close of 1910 the Mayor and Corporation of the City of Vancouver, recognizing the essential unity of interests of the population of the urban area tributary to Vancouver, approached the directors of the British Columbia Electric Railway Company with a view to the unification of the franchises under which the Company operated throughout Vancouver and its suburbs, and as part of a scheme for the incorporation of this whole area of greater Vancouver under one civic corporation. The Company expressed its willingness to fall in with such an arrangement and agreed to the condition that the City might purchase the street railway system throughout the larger area in 1934. The scheme, however, appears to have been wrecked on some details and has not been since revived.

Keeping before us, however, the fact of the larger interests involved, it is necessary to set forth briefly the essential features of the various individual franchises or agreements under which the British Columbia Electric Railway Company carries on its public services within the Vancouver district. These agreements are given in full in Exhibit 4.

The agreement between the City of Vancouver and the British Columbia Electric of October 14, 1901, consolidated the street railway franchises of the City, the Company having previously operated different parts of their system within the City under various agreements dating from 1889 to 1899. The Consolidated Highway and Light Com-

pany, which was taken over by the British Columbia Electric Railway Company, had acquired, constructed and operated under authority of various provincial acts and under agreements with the cities of Vancouver and New Westminster the street railways in those cities. Under the Vancouver by-law of October 14, 1901, the British Columbia Electric is given the right for eighteen years from February 11, 1901, and for any period of renewal that may be granted, to equip, maintain and operate a single or double track street railway, with all necessary equipment, on the streets of the city. The usual conditions were made with reference to the location of the new lines and the laying of temporary and permanent tracks, the Company being required to lay and maintain a permanent road-bed to the satisfaction of the city officials, between oil tracks and for eight inches on either side. Single fares were not to exceed five cents within the city limits, and all passengers were entitled to transfer checks within these limits. Infants in arms were to be carried free, and school children under twelve years at half fares on school days between eight and five o'clock. Free passes were to be granted to the Mayor and city officials and to policemen and firemen in uniform. The speed of the cars was not to exceed eight miles on business or ten miles on residential streets. On certain streets the cars should run at not less than ten-minute intervals, on others at twenty-minute intervals, and on the Westminster branch between five and seven p.m. every half hour, and at other times every hour. The Company is given the option of running cars or not between midnight and six a.m. With the approval of the Council, the Company may open new lines on other streets, the Company to have the option for sixty days of opening a line on any street where another Company or the City itself proposes to construct a line. The Company shall pay to the City of Vancouver the following percentages on its gross annual street car receipts within the limits of the city:

Receipts under \$75,000 1 per cent
Between \$75,000 and \$150,000	... 2 per cent
Between \$150,000 and \$300,000	... 3 per cent
Between \$300,000 and \$500,000	... 4 per cent
Between \$500,000 and \$1,000,000	... 5 per cent
Between \$1,000,000 and \$1,500,000	... 6 per cent
Between \$1,500,000 and \$2,000,000	... 8 per cent

At the expiration of the term of the agreement (February 11, 1919) the City may on six months' notice before the expiration of the term, either alter the terms of the agreement as may be mutually acceptable or may assume the ownership of the lines of the Company within the city limits, and all property pertaining to these lines. The valuation may be mutually agreed upon by the City and the Company, or, on failure to agree, it may be settled by arbitration under the following terms: The arbitrators to fix the market value of the lines to be taken over, exclusive of the improvements on them. Improvements and personal property to be valued separately and on the basis of the cost of the same to the Company, subject to

a reasonable sum for depreciation. The valuation, however, not to include any payment for franchise or good-will. The City shall have eight months after the valuation to complete the purchase, but if it does not exercise its option at that time, it may do so or alter the terms of the agreement at the end of every five year period after the expiration of the charter on giving one year's notice. Should the City take over the service within its own limits, the Company may still operate the inter-urban line between Vancouver and New Westminster as under the agreement of 1901. Any dispute as to the terms of this agreement to be settled by arbitration under the Arbitration Act. While under this agreement of 1901, the previous agreements between 1889 and 1899 were cancelled, yet this was not to affect any rights, powers or privileges granted to the Company in its original acts of incorporation, or the right of the City of Vancouver to tax the Company's property.

HASTINGS TOWNSITE

In 1908 a special agreement was entered into between the Provincial Commissioner of Lands and Works and the B. C. Electric Railway Company in relation to the unorganized district known as Hastings Townsite, which has since been incorporated with the City of Vancouver. In this arrangement the Company was recognized as having the rights and powers conferred by the Consolidated Railway Company's Act of 1896. In response to the desire of the inhabitants of this district to enjoy railway, tramway, street railway, electric light, heat and power facilities, the Company agreed to furnish these services. The Company is therefore authorized to construct, maintain and operate a single or double track street railway with the necessary equipment, including telegraph or telephone lines, on its line of railway, and may supply electricity for light, power, heat, etc. In supplying these services it may operate over all roads, highways, streets and bridges. In the exercise of its rights and powers the Company is subject to the usual conditions as to location, nature of track, treatment of streets, and the speed limit, which is placed at fifteen miles per hour.

NEW WESTMINSTER.

The B. C. Electric Railway Company, having taken over the Westminster Street Railway Company, having a charter from the City of New Westminster granted in 1890, succeeded to the rights and obligations of that Company. The Company was given the right to construct, equip, maintain and operate the necessary works for a street railway within the city limits, subject to certain specified conditions. These conditions are in the main the usual ones in such cases, such as approval of location by city officials, expeditious prosecution of the work, with the minimum interference with street traffic, and when it is completed the right of the city without compensation to the Company to open up the streets on which cars may run, to construct drains, lay water pipes, etc. The speed was limited to six miles an hour,

and the fare to five cents. After the population exceeds 10,000 the Company will have the option of constructing lines on additional specified streets or allowing the right to be granted to others. Height of poles to be not lower than 22 nor higher than 130 feet.

Agreements were also made with the municipal corporation of Point Grey, the districts of North Vancouver, South Vancouver, Burnaby and the Township of Chilliwack, granting to the B. C. Electric Railway Company the usual rights for the construction and operation of street railways, subject to the usual conditions safeguarding the rights and conveniences of the various municipalities. As these features have been already referred to, it will be necessary to cite only such conditions as apply to any individual municipality.

POINT GREY.

The agreement with Point Grey is dated September 10, 1912, and continues for the period of 37 years. The first lines to be constructed are specified in the agreement. A minimum 20-minute service is required. In specifying fares the municipality is divided into two zones, within each of which there may be a maximum fare of five cents. Special tickets for permanent residents of the municipalities, known as settlers' tickets, shall be issued at the rate of ten for fifty cents, and these shall be available through both zones and with transfers into Vancouver City. A special clause provides that the section of Point Grey adjoining the City of Vancouver down to King Edward Avenue shall enjoy the same rates and transfers as prevail in Vancouver City. The Company is granted the right to operate freight cars within the municipality, but not to the detriment of the passenger service. Should the Company not comply with the conditions of the agreement in failing to operate for six months any portion of the specified lines, the franchise of the Company shall be forfeited over that portion which it fails to operate and the Council of the municipality shall have the option of taking over, at a valuation under arbitration, such portions of the line, or of requiring the Company to remove its rails and property, leaving the street in normal condition. At the expiration of the charter period of 37 years the corporation shall have the right on six months' notice to take over the street railway at a valuation or to exercise this right at the end of each ten-year period thereafter.

NORTH VANCOUVER.

The agreement with the District of North Vancouver, now including the city of North Vancouver and the remainder of the District, is dated 1905 and is made between the corporation of the District and the Vancouver Power Company, one of the subsidiary companies of the B. C. Electric. The agreement covers the construction and operation of an electric street railway for the conveyance of both freight and passengers. In addition to the usual general terms as to rights and obligations on either side, certain specified features are prescribed, such as that the cars

shall be run as far as possible to connect with the municipal ferry service in Vancouver at intervals of not more than half an hour from May to November and one hour during the rest of the year. Single fares were not to exceed five cents within three miles of Lonsdale Avenue Wharf, with five cents extra for every additional two-mile area beyond the first zone. The Company is granted an exclusive franchise for a street railway within the district for fifty years, at the end of which period the municipal corporation has the right to purchase the Company's lines or to exercise that right at any succeeding ten-year period. The Company is granted exemption from municipal taxation on all its real and personal property for ten years, to 1913.

SOUTH VANCOUVER.

The agreement with South Vancouver dates from 1909 and is directly with the B. C. Electric Railway Company. The franchise extends for forty years, with right of renewal. The streets on which the first tracks are to be laid are specified and the usual conditions as to construction, maintenance and repair of street, frequency of service, fares, passes, etc. The franchise covers freight and passenger service. At the end of the forty-year franchise the corporation has the right to take over the system at a valuation or to do so at the end of each ten-year period thereafter. As in the clause of North Vancouver, the Company enjoys exemption from taxation for ten years on its real and personal property. No part of this agreement, however, including the clause with reference to taxation, applies to the Vancouver and New Westminster Inter-urban railway or any other line on a private right of way of the Company.

BURNABY.

The agreement with Burnaby is dated 1913 and is directly with the British Columbia Electric Railway Company. The first agreement was made in 1909, but, some doubts existing as to its legal validity on account of not having been submitted to the ratepayers, the agreement of 1913 was passed and approved by the ratepayers. The Company has the general right to construct lines on any of the streets except Kingsway between Central Park and Edmonds. Two specified lines are to be constructed, one on Hastings Street for two miles from the Vancouver city limits, and the other from the terminal of the Company's line on Columbia Street, New Westminster, along that street and North Road to the junction with Clark Road as soon as settlement warrants. The location of other lines to be approved by council. Most of the features of the agreement follow the usual lines. The fare are limited to five cents within three miles from the western boundary and an additional five cents within every additional two miles. Permanent settlers, however, enjoy the same rights as on the New Westminster inter-urban line for the same distances, and with the same transfer privilege. The agreement covers both freight and passenger service. The charter runs for 36½ years, with the option

of purchase then or at the end of any subsequent ten-year period. Failure to operate any portion of the service for six months will entail the same consequence as in the Point Grey agreement.

CHILLIWACK.

The Chilliwack agreement is between the township corporation and the Vancouver Power Company under the terms of the Provincial Water Act. The agreement dates from 1907 and authorizes the Company to construct and operate as part of the inter-urban electric railway system extending from New Westminster to Chilliwack an electric railway in the township of Chilliwack with single or double track, for both freight and passenger service, on the right of way of the Company except where it is necessary to operate along, across or over the roads or streets of the municipality, which it is authorized to do under the usual terms in such cases. Where, however, the Company finds it necessary to use a municipal bridge it must be strengthened if necessary at its own expense. Passenger fares after a minimum of five cents shall not exceed four cents per mile between local points or three cents per mile within the limits of Chilliwack and New Westminster. The Company shall enjoy exemption from taxation on its real and personal property for ten years. It is granted an exclusive franchise on the roads used by it and has the first option for the building of any other lines desired within the municipality.

LULU ISLAND

The remaining lines operated by the R. C. Company, the Kitsilano, Lulu Island and Eburne lines, belong to the Canadian Pacific Railway, through its ownership of certain subsidiary companies, and are leased from that company by the B. C. Electric under an agreement providing for the operation of these lines as an electric tramway, the electric equipment and power to be supplied by the B. C. Electric Railway Company under special terms of the agreement. The last agreement, of October 26, 1909, supersedes certain other agreements made in 1904 and 1905. To protect its own requirements the C. P. R. stipulates that the B. C. Electric agree to the operation of a freight service over the line from Granville Bridge to Kitsilano and to Steveston, on Lulu Island via Eburne, and from Eburne to New Westminster. No freight cars belonging to any other railway company than the C. P. R. shall be taken over these lines without the consent of the C. P. R. nor can the electric railway Company ever over these lines any freight or passengers from any railway in competition with the C. P. R. For the use of the lines specified the B. C. Electric agrees to make an annual payment of \$25,000 for the first ten years, dating from June 30, 1910, and \$30,000 a year for the next eleven years. The agreement extends for twenty-one years from July 1, 1909, with the right of renewal for another twenty-one years on twelve months' notification by the B. C. Electric. The terms of the renewal shall be

the same except as to the annual payment, which may be readjusted by agreement or arbitration. When the agreement ultimately ends the C. P. R. shall repay the Electric Company the actual cost, without interest, of all branch extensions, double tracks, etc. Should the C. P. R. decide to continue the operation of the road by electrical power, it

may take over the electric equipment at its existing value, but if not, the B. C. Electric may remove its electrical plant and equipment. Special schedules refer to charges for switching, rental of care and switches to special manufacturing plants, etc. The operation of these lines is subject to the Dominion Board of Railway Commissioners.

II. PERIOD OF EXPANSION AND DEPRESSION

REACTION FOLLOWING BOOM SERIOUSLY AFFECTED COMPANY

Dr. Shortt finds it surprising that the Company did not more fully outrun what transpired to be the permanent needs of the districts, such was the expansion previous to 1913. Unfavorable effect of falling revenue upon Company's stock. Jitney adds further blow.

UNDER these various agreements relating to the operations of the Company on the mainland the British Columbia Electric Railway Company had rapidly built up an extensive system of urban and suburban electric railways. This was encouraged by the inducements held out and the constraining influences of an exceptionally rapid development centering in the city and district of Vancouver. The inter-related system as it now stands is fully delineated in the maps furnished by the Company and accompanying this report. When, in 1897, the Company undertook to develop a comprehensive system of transportation for the Vancouver district the population of the city and district was quite limited. In 1901 Vancouver and New Westminster contained about 32,500 people. With the era of development and prosperity which set in immediately after that time, through the increasing influx of capital and population, there resulted an enlargement of area and an encouragement of enterprise and speculation which had the natural effect of enlarging both the need and inducement for an expanding system of local transportation. The British Columbia Electric Railway Company thus found that it had entered the Vancouver field at a very opportune moment. Expansion was not only permitted and justified, but

urged and demanded by all elements of the population with ever increasing importunity. It was not sufficient to build or extend lines as the actual increase of population required and justified a more extended service. The lines were demanded in order to meet prospective needs and even to induce building and settlement in suburban areas as yet very sparsely settled. For years this policy of expansion was not only constantly urged upon the Company, but in actual practice was being as constantly justified.

Still the rate of expansion, though without precedent anywhere else in Canada, never seemed to satisfy either public or private demands. In Exhibits 20 and 21 will be found correspondence, private and official, urging ever more rapid extension of the Company's services.

Living and operating in an atmosphere of such phenomenal growth and optimism for upwards of fifteen years, where, with the exception of a temporary pause in 1907-08, almost every year surpassed the last, both in volume and ratio of expansion, there is little occasion for surprise that the Company expanded so rapidly and so far, but rather that it had not more fully outrun the existing needs of the districts which it served.

Early in 1913, when the driving force of the boom was spent, the

Company was not unreasonably in advance of the actual requirements of its field operations. Had the expansion in population and areas simply ceased at that time, and normal activity in business continued, the Company would evidently have had little difficulty in meeting the situation. Unfortunately, however, a rather heavy reaction set in. Population diminished, activities in the newer districts ceased and with them the pressing demands for transportation of materials and workmen. Business shrank heavily even within the more central areas. While this reaction and the accompanying readjustments were in process the great war broke out, bringing with it at once a paralysis of capital investment and an urgent demand for men at the front and elsewhere in the east. The exodus of population which had already begun was thus very greatly increased, solving, it is true, much of the problem of unemployed, but leaving stranded large investments of capital which could not follow. On the other hand, very little of this invested capital was able, as in the east, to profit by the rapidly expanding demand for munitions of war.

Even where the west could supply such needed articles as coal, timber and fish, the difficulties of transportation soon intervened to paralyze their resources. Later the very dearth of transportation facilities furnished one of the chief elements of relief for the district in the establishment of shipbuilding, which with a few minor factors of war expenditure and the distribution of very considerable sums in the aggregate to the families and dependents of the soldiers at the front, has of late perceptibly improved the situation as compared with the earlier years of the war.

Obviously a street railway system which, though one of the most necessary and permanent services in modern urban districts, is yet wholly tied to local areas, suffers exceptionally

from the stagnation of trade and especially the shrinkage of population. Under these circumstances the B. C. Electric found itself confronted with the maintenance of certain services in outlying districts which had been opened in response to the demand for further extension, but which extension had been arrested before sufficient population had been established to meet the primary costs of the service. In this connection it must be remembered that long before a sufficiently permanent population is settled in a suburban district the street car traffic in that district may be both extensive and profitable owing to the large number of workmen to be carried to and fro, not to mention the materials to be transported while the residences of the subsequent permanent population and the streets, including water, sewage and other conveniences, are being constructed. Arrested development in any suburban area is, therefore, a very serious matter for the revenues of a street railway line serving such an area. At the same time those citizens who have built their homes in these areas and are living there in the confident expectation that the transportation line which was built to serve the district will continue to be operated, have substantial rights which cannot be lightly neglected either by the street railway company or their fellow-citizens in other and more fortunate parts of the common urban district, even though under different municipal corporations. This merely illustrates and emphasizes the fundamental principles in the treatment of modern public services that the area occupied by a common urban population must be treated as a whole and the interests of all elements in a population clustering around a common civic centre must be duly considered and safeguarded to the greatest possible extent. Where the service is rendered by a public municipal corporation the question is one of revenue and

expenditure supplemented by the power of taxation to meet the temporary or permanent deficits. Where the service is rendered by a private corporation, however, the question is one of a balance of revenue and expenditure supplemented only by such reserve funds as may have been accumulated by the corporation to meet temporary deficits, or by the further borrowing power of the corporation where it feels that temporary losses may be successfully offset by future gains under more favorable conditions.

In the light, then, of the economic experience of the past twenty years within the district of Vancouver we may survey the situation of the British Columbia Electric Railway Company as regards its capital investments and its consequent revenues and expenditures.

COMPANY'S FINANCIAL RETURNS SHOW
SERIOUS DEFICIT

In Exhibit 8 is presented the consolidated income and expenditure account of the company from 1914 to 1916. This eliminates all cross charges by one of the company's services to another, as for instance the charges of the Power Company to the Electric Railway Company. It covers, however, all the activities of the Company and its subsidiary companies within the province. Within the three years covered by the table the gross earnings of the electric railway system had fallen from \$4,097,182 to \$2,499,971—a decrease of approximately 37 per cent., the decrease within the first year being 25 per cent. The proportion payable to the City of Vancouver decreased from \$79,059 to \$34,185, or over 55 per cent., the decrease in the first year being over 31 per cent. At the same time the revenue from electric light, power and gas decreased only 18 per cent. in the two years, or 10 per cent. in the first year. The total revenue, deducting payments to the City of Vancouver, fell from

\$7,188,964 to \$5,105,027 in the two years, or a decrease of 29 per cent., the decrease being 19 per cent. in the first year. Operating expenses on the other hand decreased from \$3,807,311 to \$3,028,440 for the two years, or slightly less than 22 per cent., being 12 per cent. in the first year. Thus for these years the revenue fell considerably more than the operating expenses. After setting aside the usual percentage for renewals and maintenance reserve, the net revenue had fallen from \$2,247,556 in 1914 to \$875,182 in 1916, through \$1,247,890 in 1915.

Computing the return on the capital invested, as stated in the published reports of the Company (Exhibit 16), the percentages for the three years are as follows:

1914	4.69 per cent.
1915	2.60 per cent.
1916	2.13 per cent.

On taking the total capital expended, as given in Exhibit 5A, the percentage for 1916 would be only 1.85. As pointed out, however, much of that expenditure was not employed in the service of the public. Hence the allowable capital for profits was reduced to \$43,446,816. The return on this basis for 1916 would be practically 2 per cent. Inasmuch, however, as the amount required to pay the interest on the bonds or debentures of the Company amounts to \$987,681, the net income of the Company for 1916 being only \$875,182, there is a deficit of \$112,499 in relation to the fixed charges for the year, there being no return whatever on the share capital of the Company, amounting to about \$21,000,000. This deficit, therefore, must be drawn from the reserve funds, most of which, however, as we have seen, have been invested in the plant of the Company. As a matter of fact, the Company withdrew from reserve some £70,000, or \$350,000, to meet its debenture charges. As is indicated in the earnings for 1916-17 (see Exhibit 3), the situation has improved

somewhat for the current year. The earnings from the Vancouver district, including the city and suburban lines, were greater for the eleven months to May 31, 1917, than for the corresponding period to May 31, 1916, by \$132,484, or over 12 per cent. Although the returns for June of this year will be materially affected by the strike, yet the company may be able to meet its fixed charges for the year. At the present time, however, it is not a question as to whether the Company can pay dividends on the most modest proportions, but whether it can maintain an equilibrium between income and fixed charges. In Exhibit 9 the totals of the consolidated income and expenditure account given in Exhibit 8 are divided for the year 1916 as between the mainland and Vancouver Island. This division indicates that the situation is considerably worse for the Company on the mainland than on the island. The percentage of net revenue on the mainland being somewhat less than one-half that on the island, a more detailed division is given of the gross earnings of the whole system as given in Exhibit 8 for the three years ending June, 1916. This distinguishes the gross earnings derived from each municipality. It distinguishes also between the passenger and freight services of the railway and between the supply of light and commercial power. The gas earnings are also treated separately.

GREATEST DECLINE TOOK PLACE ON RAILWAY LINES

From these details it is evident that the greatest decline in the two years has been in the railway passenger service, amounting to 40 per cent., apart from the leased C. P. R. line to Lulu Island and New Westminster. The heaviest declines have been in the Vancouver City and New Westminster interurban. The former amounted to 44 per cent. and the latter to 48 per cent. The percentage of decline in freight rates was little

more than one-half that in the passenger rates, being 21½ per cent. This was almost entirely due to a decline in the New Westminster interurban, which amounted to 57 per cent., and the Lulu Island line at 41 per cent. The Fraser Valley line from New Westminster to Chilliwack, having the most important freight service, slightly increased its income, while the Saanich line practically held its own. The incandescent and street light earnings fell 20 per cent., the chief declines being in Vancouver and district and North Vancouver, amounting to 22 per cent. each, while the Fraser Valley practically held its own and Vancouver Island declined 11 per cent. Commercial electric power fell only 10½ per cent., that being the rate of decline in Vancouver and district, while the Fraser Valley declined 20½ per cent., North Vancouver 14, and Victoria and New Westminster 12 per cent. each. The returns from gas in Vancouver and Victoria both fell about 30 per cent. From these returns it is plain that the most serious financial embarrassment to the Company during the past three years has come from its passenger-carrying or street railway service, and that the heaviest losses were incurred in Vancouver City and the New Westminster interurban services. As we shall find, it is just here that the jitney opposition has been the most severe.

Exhibit 11 presents in both tabular and graphic form the gross earnings and the number of passengers carried on the Vancouver district section of the electric railway for each month from July, 1911, to May, 1917. These tables and charts exhibit certain interesting facts. In the first place it is evident that the maximum business of the Company had been reached in 1912. There was a perceptible falling off in 1913, which developed more rapidly in the latter half of 1914, the decline taking on a special character after the appearance of the jitneys. Before the advent

of the jitney car, in November, 1914, it is found that the maximum number of passengers carried each year occurred in the midsummer months of July and August, while the lowest number were carried in midwinter, especially in February. December, with its holiday movement and shopping, invariably showed a temporary revival after the autumn decline and before the midwinter drop. When, however, the jitneys appeared in the scene there was in the first place a rapid falling off in the number of passengers carried at any time, and in the second place it is found that the exceptional midsummer increase had vanished and that instead the greatest patronage of the cars occurred during the winter, when weather conditions were unfavorable for open-air riding. This is one of the numerous striking evidences presented of the effects of the jitney competition on the earnings of the Company's street railway system, especially in the City of Vancouver. The experience of Winnipeg is similar. (See Exhibit 156.) The table and chart of Exhibit 12 give the gross earnings of the railway department, passenger and freight, for the whole system, Vancouver Island included. It exhibits much the same movement as the previous chart, with evidence of substantial improvement for the eleven months to the end of May, 1917. The tables and charts in Exhibits 13 and 14 indicate very clearly the extent to which, in the railway department of the Company, in the Vancouver district and on the entire system, operating expenses have overtaken and exceeded gross earnings since the middle of 1914. While the situation had improved somewhat since 1915-16, yet up to the end of May, 1917, the railway system was still operating at a considerable loss, and the strike of June, did not improve the situation.

Exhibit 15 presents the losses on operation for the Vancouver district

during the last three years, under the form of cost of operation and earnings per car mile. From this we find that the average cost of operation per car mile for the year 1915-16 was 20.88 cents. While for the eleven months to May, 1916-17, it was 20.77, yet the earnings for these periods were only 17.17 and 19 cents respectively. The car mileage operated on the different sections of the Company's lines for the years 1911 to 1916 is given in Exhibit 22. Here again we find that the car mileage earnings reached their maximum in nearly all cases in the year 1913-14, declining for the next two years. The only exceptions were the City of Victoria, which showed an increase in 1915-16, and the Spanish Peninsula line, which reached the maximum in 1914-15. As before, the greatest falling off is shown in the case of Vancouver City and suburban and the New Westminster interurban. Exhibit 16 gives, for the whole field of the Company's operations, the capital invested, the net profits and the rate of income according to the published accounts, for the ten-year period from 1906 to 1916. According to this return the maximum profit was reached in 1908, when the rate was 7.82. From that period to 1916 there has been a pretty steady decline to 2.13 per cent. in 1916. As one natural result of the falling revenues of the Company and its consequent embarrassed financial outlook, the stocks and bonds of the Company have fallen heavily on the London Stock Exchange, where they are chiefly known and dealt in. In Exhibit 3 is given the market price of the various stocks and debentures issued by the Company as reported in June of each year from 1909 to 1917. These quotations show that most of the shares reached their highest value in 1911, when the deferred ordinary stock, of par value 100, reached 150, the preferred ordinary 129 and the 5 per cent. cumulative preferred 112, rising the

following year to 114. From these periods of maximum value they declined steadily until June, 1914, when they were all still above par, but for the next two years the decline was very rapid, the deferred ordinary reaching 39½, the preferred ordinary 40½ and the 3 per cent. cumulative 58½. For the past year the preferred ordinary has fallen further from 40½ to 35½. The debentures, which of course are not subject to the same speculative influences as the stocks, maintained their values fairly well until 1913, after which they declined from about 15 to 40 per cent. The possible significance of this heavy depreciation in such securities will be dealt with later, but the facts are introduced here as further evidence of the serious financial condition of the Company.

RENEWALS MAINTENANCE RESERVE
MORE THAN JUSTIFIED

It having been suggested that the Company was setting aside an unnecessarily large amount as a renewals maintenance fund, three statements were submitted by the Company (see Exhibits 23, 24 and 25) showing in detail the percentage of reserve for each important item in the plant and equipment of the Company. This arrangement, it is claimed, is in accordance with conservative practices elsewhere. Exhibit 25 gives the total amount set aside each year from 1911 to 1916, the amount expended and the balance added to the reserve, as also the total reserve accumulated and which in 1916 amounted to \$3,888,387. It is, of course, in accordance with safe and reasonable practice everywhere that there should be a very considerable fund accumulated during the early years of operation of a new system, inasmuch as, while there is a steady decline in the quality of the various items of the plant and equipment, it will of course be some years before the actual renewal must take place, but when numerous replace-

ments are required, heavy charges must be immediately provided from the fund and the necessary reserve cannot be obtained within a year or two. In Exhibit 24 is given the estimate of Mr. Conway, the Chief Engineer of the system, in 1915, as to the amounts to be provided for Vancouver district alone each year between 1915 and 1930. This shows a total estimated expenditure of \$1,450,000 for the period, while the amounts set aside annually for the same period on the accepted basis would be only \$564,958. A comparison with the rates made in other cities more than justifies the Company in the policy and practice adopted and carried out in the accumulation of the renewals maintenance fund.

A special analysis of the cost of operation of the different sections of the street railway for the month of May, 1917, is given in Exhibit 34. A separate statement of the chief cost factors is made for each one of the subdivisions of the entire transportation system. These subdivisions, it may be recalled, are (1) the city and district of Vancouver, including the adjoining suburban municipalities of Point Grey, South Vancouver and Burnaby, (2) New Westminister and the interurban lines connecting it with Vancouver, and the Fraser Valley line to Chilliwack, (3) North Vancouver district, (4) Victoria and suburban, (5) the Saanich Peninsula. In each of these districts for over two years past the earnings have failed to meet the cost of operation.

In operating expenses, labor is of course the greatest factor. Taking the section of Vancouver City and district, we find that 35 per cent. of the total outlay represents wages paid to conductors, motormen and trainmen. Other important labor factors are included in the maintenance of way and of equipment, and the work centering in the car barns, etc., amounting to an additional 10 per cent. and making approximately 45 per cent. for the cost of labor. The

second item in importance is the cost of power for the operation of the lines, amounting to 21 per cent. The renewals maintenance reserve comes third, with 13 per cent. Head office expenses account for 8 per cent., leaving about 13 per cent. for miscellaneous expenses, including $2\frac{2}{3}$ per cent. for the special contribution to the City of Vancouver. In somewhat varying percentages this fairly represents the general situation on the other sections of the street railway service.

In Exhibit 33 a tabular statement is given of the comparative costs for the years 1914 to 1917 of the chief articles and materials used by the Company in the operation of its various plants. The average annual quantity of each article required is also given. The total costs for standard amounts of the list of articles given shows an increase from \$67,166 in 1914, through \$73,296 for 1915 and \$92,773 for 1916, to \$119,500 in 1917, or an increase of practically 78 per cent. in three years. During the same period, on the plea of the increased cost of living, the employees of the Company had secured an increase in wages from September 1, 1915, with an agreement continuing until July 1, 1917. In the autumn of 1916, however, the Company was asked for a special increase in wages on account of the exceptional rise in the cost of living due to the war. There being a substantial basis for the claim, an increase was granted from September 16, 1916, although the revenues of the Company by no means justified the extra outlay. After a winter of high record war prices the employees in May, 1917, made a further demand for an additional war bonus. In view, however, of the actual losses at which the Company was forced to operate its street railways, it declined to grant the increase unless the revenue could be improved. In this connection it drew attention once more to

the jitney competition as seriously depleting its otherwise greatly reduced income. While acknowledging the chief cause in the decline of the revenues of the Company, the street railway employees insisted on their demands, with the result that a strike was called, which led directly to the negotiations ending in the decision of the Provincial Government to appoint the present Commission. Pending the report of the Commission the extra wage rates demanded by the employees were granted.

JITNEY CUTS INTO COMPANY'S MOST PROFITABLE BUSINESS

In Exhibit 120 a general analysis is given for each section on the mainland for the year 1915-16 of the capital investment, gross earnings and operating expenses for the street railway and the light, power and other undertakings of the Company. This shows that while a considerable revenue was derived from light, power and gas, in each section of the Company's transportation business there had been a very serious deficit, amounting in all to \$553,254. Of this deficit no less than \$300,701 was due to the Vancouver section and the New Westminster and Central Park route, the regions of greatest density of population and which therefore ought to have been most profitable had they not also been the field in which the jitney competition on the mainland is entirely located.

As to the transportation business of the Company, therefore, it is obvious from the returns presented, and especially from the analyses given in Exhibits 34 and 120, when taken in the light of the economic reaction of the past few years that the revenues of the Company from its street car system are far short of meeting operating expenses. This being so, there is no question at present as to any fair and adequate rate of profit on the actual capital investments of the Company, but simply a question as to how it is possible for the Company

to obtain sufficient income to enable it to furnish those services to the public which are indispensable to the maintenance of normal social and business life in an extensive modern urban centre. Although the revenues of the Company from the whole field of its undertakings may show a very moderate surplus, yet the street car service must in the end stand on its own basis, especially as it may be necessary to revise the rates charged in the other fields.

In the evidence presented before the Commission the critics of the Company have maintained on the one hand that it has not exercised sufficient energy and alacrity in meeting the expanding needs of the population of Vancouver and Victoria areas, while on the other hand the Company is also accused of having extended its services too widely and rashly, thus involving itself in quite unwarranted investments of capital, on which the public should not be expected to pay dividends. While it is impossible to reconcile such apparent attempts to condemn the Company at any cost, yet it may be observed that where practically all elements of the community were in error as to the real nature or duration of the boom which was in progress in British Columbia, the representatives of the Company, even had they been endowed with supernatural wisdom, could hardly remain completely out of touch with the hopes and expectations of the public which they served. The wisdom of retrospect should be more self-consistent if not more charitable than indicated in the efforts to condemn the Company, whatever course it took.

In the course of the actual expansion of the street car system, both within the original city limits and in the extensions into the suburban areas, it is quite evident that few, if any, of the street car lines paid the expenses of operation for some time after they were opened. However, in

such swiftly expanding regions traffic developed so rapidly for at least a decade previous to 1913 that every new expansion was soon quite vindicated, until just before the period of reaction, when there were, of course, certain sections of the service which had not yet reached the remunerative stage, when they were left for a time unavoidably unproductive. In the case of such lines it might be said that the Company, as in the case of other unproductive enterprises left stranded by a receding tide, might either take up such lines altogether, or at least abandon them while the depression continued. Such suggestions, however, raise very fundamental questions with reference to the obligations of public service corporations. The services of such corporations having once been established in response to the requests and needs of the citizens in outlying portions of modern civic centres, those who have provided themselves with permanent residences in full reliance upon the continuation of services which are of vital interest to them would have a very real grievance against any public utility corporation or municipal body which might lightly deprive them of such indispensable services. A corporation, therefore, which has undertaken to supply these needs has entered into a practical, if not always a strictly enforceable legal obligation to continue a service once established, even through periods of depression and loss, so long at least as there is any reasonable chance of maintaining the service until better times return. Should it be demonstrated that the conditions of operation are such as to involve unavoidable bankruptcy, the service must indeed be abandoned or the conditions of its continuance revised. In such a case rather than sacrifice the whole service the citizens in the areas of unprofitable operation may consent to have the rates raised and the frequency of the

service curtailed. It is to be assumed in such cases that the public service corporation will practise the severest

economy consistent with the safety of the public and the proper operation of the utility.

III. JITNEY or STREET CAR

JITNEY CANNOT TAKE STREET CAR'S PLACE, IS DECISION

Competitive automobile, says Dr. Shartt, makes it financially impossible for street car service to continue. Jitney unable to meet requirements of transportation should electric railway be forced out of business. Demoralization of financial and commercial interests would result, and in the end, corporations, not individuals, must furnish transportation.

IT was found, however, that not only had the British Columbia Electric Railway Company and the general body of citizens served by it suffered from the natural and unavoidable consequences of severe economic reaction and the exceptional loss of population, but at the very period when these conditions were beginning to press heavily upon the Company a new and altogether unforeseen factor suddenly emerged and at once seriously impaired the already depleted revenues of the Company. This was the so-called jitney service, which suddenly entered into active competition with the street cars on the central, shorter, well-paved and most lucrative routes. The moment of their appearance was certainly not one in which capital for providing a new and efficient service could be readily procured. A peculiarity, however, of this competitive factor was that it called for the expenditure of no new capital, but simply the use of second-hand automobiles, vehicles of transit already existing and for which neither sale nor employment could be had in any other lines, while their owners were for the time being without other means of employment. The owners of these automobiles were simply following the example furnished in several of the American cities of the Pacific States, where certain possessors of automobiles sought to supplement their diminishing, or replace their

vanished incomes by carrying passengers for short distances in their cars at five-cent fares, this being the condition on which they were able to attract patrons. The name "jitney" applied to this new type of public vehicle was imported with the service itself. It appears to have originated in Los Angeles, where "jitney," the name of a small Spanish-American coin, was a slang term for five cents employed by the "barkers" or barrel-head vocalists who vociferated in front of the lower types of side shows on midways, at fairs or suburban amusement grounds. The name, once applied to this type of automobile service by many of its patrons, adhered and in time was accepted by the operators themselves and employed to designate their more or less loose associations for mutual benefit. The tendency towards the extension of the term to designate the more stable motor bus service in the larger cities has been greatly resented, and indeed there is not much in common between the motor bus and the jitney. In its initial stages the jitney service, depending upon no regular investment of capital and involving therefore no previous organization or joint responsibility in the maintenance and regulation of the service, was regarded merely as a passing phase of the hard times and was expected to disappear either when the owners of the automobiles found more regular forms of employment or

disposed of their cars for other uses, or because necessary repairs were becoming too frequent and too costly. On the other hand, however, the persistence of the period of economic depression, the continued supply of second-hand automobiles and the substitution of other types of drivers when the original operators dropped out, led to the continuation of the competition, although in varying numbers. It is true that a wave of experiment in the jitney service, aided by the novelty of it for those unaccustomed to this reputed luxury, swept across the continent and led certain hasty observers to hail it as possibly a new and effective method of solving the perennial traffic problem of the larger cities. Yet the wave soon receded, largely owing to the inability of the service permanently to maintain itself in prosperous communities, and partly also to the adoption of necessary municipal and state regulations and the decisions of public service commissions when its logical consequences for the community were once realized. Where, however, either equally attractive methods of earning a living were not available, or, as in Winnipeg, there was a large foreign element in the population and cheaper second-hand automobiles were readily available, the jitney competition exhibited a tendency to persist, though with frequent changes in the personnel of the operators.

WINNIPEG AND VANCOUVER ONLY
"JITNEY" CITIES IN CANADA

At present, however, there are only two places in Canada where the jitney service has remained as a serious menace to the existence of the normal street car service. These are Winnipeg and the coast cities of Vancouver and Victoria. As regards their effect upon the street car service, the results have been similar in both centres. The earnings of the street railways on the central and most lucrative routes have been greatly

reduced, with the result that even in Winnipeg, where there is much less economic reaction in industry and population than in the coast cities of British Columbia, the street railway company has already found its revenue inadequate to meet its operating expenses.

The growth of the jitney competition in Vancouver and Victoria and the relative effects upon the earnings of the street cars are set forth in detail in Exhibits 37 and 38, the latter of which is also given in the Record of Proceedings No. 3. In Exhibit 37 is shown very clearly, from the records of the Company's inspectors, the sudden rise in the number of jitanes between November, 1914, when they first made their appearance, and February, 1915, when there were at least 255 different jitanes in operation during some portion of the month. The maximum number of 283 was reached in May, 1915. On June 1 of the same year the bonding regulation came into effect and the numbers dropped to 231. Except for a slight recovery in August and September, they continued to decline during the remainder of the year, and up to February, 1916, when there were only 58 in operation. With the return of summer the numbers increased again, reaching the high water mark of 124 in August. Afterwards they declined once more, falling back to the lowest number, namely 55, in February, 1917. As usual, they revived again with the spring weather and numbered 119 in May last.

As already pointed out, and as quite justly contended by the representatives of the jitney interest, the jitney is only one of the factors which have resulted in the reduction of the Company's street car revenue below the level of operating expenses. It is also true that when good times once more return to Vancouver and Victoria the street car income will probably meet operating expenses. As the experience of other cities of

similar size invariably indicates, with the advent of prosperity the jitney would largely disappear, the better drivers again reverting to their higher occupations and the others to shorter hours and higher pay. In the meantime, however, the jitney competition is greatly impairing, and if prolonged for some time may quite destroy, at least the outlying street car services. This is abundantly evident from the variation of the traffic and receipt records according to the numbers of the jitneys in operation. As already pointed out, before the advent of the jitneys the Company found its largest traffic in the summer, but since their competition developed their largest volume of traffic is in the winter. This simply emphasizes the fact that the jitney is essentially a fair weather service, and quite unable to meet the needs of the public under all conditions. Further, the daily variation in the number of jitneys in operation from January, 1916, to May, 1917, strongly emphasizes the very irregular service supplied by this system of transportation, and the further fact that it fails most markedly in times of greatest need—in other words, when weather conditions are bad. Thus in January, 1916, the numbers in daily operation varied from 113 to 25, while in January, 1917, they varied from 93 to 4. In February, 1916, they varied from 112 to 0, the latter for three days, and the following February from 105 to 0. Even in the summer months they vary greatly, evidently with weather conditions. In May, 1916, they ranged from 132 to 76, or 60 on Sunday, and last May, though somewhat steadier, they ranged from 136 to 86, or 58 on Sunday. In August, 1916, they ranged from 149 to 87, or 79 on Sunday. Similar variations both as to seasonal conditions and in daily service prevailed in the City of Victoria. The only approximation to a steady service is that furnished by the so-called Blue Funnel Line of

interurban automobiles operating between Vancouver and New Westminster on the special driveway known as Kingsway, and from New Westminster to various suburban points. As this service has several special features of its own and is not on the ordinary jitney basis, we shall have occasion to refer to it separately.

JITNEYS HAD CLIENTELE WHO LIKED PRIVACY AND SOCIAL ATTRACTIONS

The officials of the Company, from the detailed information gathered by their inspectors, have estimated the average loss per day from the jitneys operating in Vancouver at \$7, and at \$5 in Victoria. The representatives of the jitneys claim, however, and furnish evidence to substantiate certain of these claims, that a number of them make considerably more than \$7 gross per day. They also claim, with an obvious measure of truth, that the total earnings of the jitneys do not furnish a correct basis for an estimate of the losses of the Company. The jitneys, it is claimed, carry a considerable number of passengers who would not have used the street cars had there been no jitneys in operation. In this connection I leave out of account for the present those jitneys which operate in the districts not served by the street cars. The passengers obtained by the jitneys independently of the street car service, on the same routes, are made up, generally speaking, of two classes. First there are those who, in good weather and especially on fine evenings, outside the rush hours, take a jitney trip for the pleasure of the outing and especially for the enjoyment of the company which they meet with, either by accident or appointment. Observation will demonstrate, and the drivers themselves acknowledge and even urge, that their evening passengers are chiefly young people of both sexes. It is true, of course, that the street cars in all cities have always carried a very considerable number of persons,

especially in the evenings, who ride for pleasure, but it is obvious that the open-air travelling in fine weather, the easier ride in the better cars, the greater privacy and social attractiveness of the rear seats, especially in the evenings, offer inducements to many patrons of the jitneys which the larger area, formal arrangement of the seats, full illumination of the cars and consequent publicity do not afford. One driver of wide experience and shrewd knowledge of youthful human nature declared before the Commission that as an attractive commercial venture he had in mind the devising of a car for evening traffic equipped throughout with back seats only. On these and other grounds there is undoubtedly much truth in the claims of the representatives of the jitney interests that not only do the jitneys attract from the street cars a very considerable section of the pleasure-riding public, but they create a still larger traffic of their own. Obviously the revenue derived from this special traffic would not revert to the street cars were the jitneys suppressed.

In the second class of special jitney patrons comes a variable number who find that on special routes the more convenient and rapid service furnished by some of the jitneys enables them to return to their homes for midday meals which otherwise they must carry with them or obtain in restaurants in the neighborhood of their work. Certain other special conveniences of a similar nature have also to be taken into account.

When, however, full allowance is made for all the extra traffic which the jitney creates for itself, and considering the claims of the representatives of the jitneys that some drivers at least are able to make a net income of from \$1,000 to \$1,200—although in such cases the hours of work are exceptionally long—the estimate of the Company as to the amount of gross earnings of which the jitneys

deprive it is probably not far from the mark. On this basis for the city and suburbs of Vancouver the aggregate amount lost to the Company through the jitney competition for the year 1916 is given as \$261,278. The actual receipts of the Company from this area during the year were \$1,237,058. Without the jitney competition, therefore, the gross income would have been approximately \$1,498,333; but if we allow for a proportionate increase in the car mileage required to accommodate the extra passengers, amounting to 107,479 car miles, which at an operating cost of 15 cents per car mile would amount to \$16,121, we have left a net increase of \$245,157. Incidentally this shows how very far the jitney service is, even at its best, from meeting the transportation requirements of the city and district of Vancouver. The extent, however, to which it cuts in upon the income of the Company is quite sufficient to make the difference between the possibility and impossibility of financial continuance on the part of the Company. While the extra income of \$245,000 would not convert the existing losses of the Company into a surplus, yet it would probably be sufficient, with certain economies and rearrangements to be considered later, and in view of a certain tendency to recovery noticeable within the past year, to bring the earnings of the Company on its street railway business to the point of at least meeting its outlay. This would permit the Company, though with the sacrifice of any dividends on its stock, to maintain its solvency and to continue an efficient transportation service until the return of a period of normal prosperity, such as may be reasonably expected from the situation of these centres of population in relation to the commercial requirements of the continent and the valuable resources of the province. At any rate it is plain from the economic situation which has developed in the

centres of Vancouver and Victoria and the financial condition of the British Columbia Electric that it cannot continue in business under the combined influence of the unavoidable shrinkage of population, depressed economic conditions of recent years, and the competition of the jitney cars.

HEAVY TRAFFIC ROUTES MUST SUPPORT OUTLYING ROUTES

The central principle on which any adequate street car service is necessarily built is that of utilizing the greater earning power of the heavier traffic routes to support, especially in their initial stages, the outlying routes with lighter traffic, which, however, will some day come to be first self-supporting and later contributors to the support of newer and still more extended routes. If, however, anything occurs to dislocate this system, especially in the way of impairing the revenue upon which it lives, it inevitably demoralizes the service for a time and if persisted in must ultimately lead to the bankruptcy of the corporation, doubtless after a gradual suspension of the more unprofitable lines in the outskirts of the city. Obviously, if a competitive service such as the jitneys comes in, especially during a period of financial depression and loss of population, and takes away a large section of the most profitable central traffic without relieving the street railway on a single mile of the unprofitable routes, it is destroying the capacity of the general transportation system to meet its obligation, while it upsets entirely the organization on which the street railway can alone meet the standard requirements.

It has been stated, even by the managers of street railway systems, that the competition of the jitneys might be admissible were it extended equally to all the routes served by the company. Except, however, in the largest centres of population,

such as New York and Chicago, where the traffic is so voluminous that several concurrent systems cannot adequately provide for it, such a form of competition, while fair in the sense of sharing the profitable and unprofitable portions of the field, can only mean that one system or the other must succumb within a comparatively short time or that both will fail, naturally after a period of greatly deteriorated service for the public. In other words, a field which will support one adequate and efficient transportation service will seldom support two, no matter how equal are the terms of the competition between them. As between rival systems of transportation it is reasonable and proper that that which is the better able to meet the needs of a modern city population should survive. No vested interest or prospective sacrifice of capital invested in good faith in a service which proves to be inferior to another can be successfully pleaded as a reason why the less adequate service should be maintained. On this basis, as between the existing jitney and the electric street car service the great practical question is, does or can the jitney furnish a cheaper, a more uniform, more adequate, reliable and responsible service than that of the existing street cars? If so, instead of being interfered with and suppressed, it should be given free course and encouragement, but if not, since it is evident from the detailed financial returns of the Company already referred to that the two systems cannot co-exist without the disappearance of the street railway, it is plain that the general interest of the community requires the elimination of the jitney as a condition of retaining the existing transportation service, beyond at least the central and more densely populated city areas.

The special arguments for and against the continuance of the jitney services in Vancouver and Victoria were submitted for the most part in

written form and will be found in the exhibits which accompany this report. The chief exhibits on the part of the Company are numbers 37, 38, 107, 144, 145, and Proceedings No. 3 and No. 4, Vancouver; also exhibits Nos. 15 and 26 and Proceedings No. 4 in Victoria. In support of the jitney claims are exhibits Nos. 46 to 72 and 119, and Proceedings Nos. 5, 6, 7 and 8, Vancouver, and exhibits Nos. 27 to 35 and Proceedings Nos. 4, 5 and 6 in Victoria.

In addition to the evidence submitted before the Commission, much information has been obtained by the Commission from other sources in Canada and the United States.

IS THE JITNEY AN EVOLUTION IN TRANSPORTATION?

As may be observed from a perusal of the argument and evidence presented in favor of the jitney interests, the lines followed and the conclusions reached are very far from consistent with each other. Sometimes it is held that the jitanies are quite prepared to take over immediately the present street car service of the B. C. Electric; at others it is admitted that they could do so only after some considerable development. It is admitted as obvious, however, that with all the superior qualities claimed for the jitney service, since it is neither possible nor desirable that these two systems should serve the same districts or operate on the same streets, either immediately or at least in a short time the electric street car must be supplanted by the jitney or the motor bus. In those portions of the argument where it is conceded that the jitanies are not prepared to immediately take the place of the street cars, no suggestions are made as to how the interval is to be filled in.

There can be little doubt that if the facts are as presented in the general run of the jitney argument, the conclusion reached is perfectly sound and any attempt to prolong the existence of a company whose

system of service is plainly obsolete, or to temporarily save it from bankruptcy by eliminating a superior competitor, readjusting rates and routes, or introducing other minor economies, would be at once misdirected charity and unjustifiable public policy. If the capital investments of the Company in its street car service are obviously doomed to obsolescence because a superior service has been developed, and if, as is amply demonstrated, the Company is at present losing heavily on its annual operation, what could be more unwise in principle, more ruinous to the Company, more contrary to the interests of the citizens of the districts of Vancouver and Victoria, than an attempt to prolong the present unfeasible situation when the inevitable outcome is plainly in sight?

It is doubtless a serious matter for the future financial prospects of the coast cities, and indirectly of the Province of British Columbia, that British capitalists should have been induced to expend in good faith such large amounts of capital in electric railway systems in the chief civic centres of British Columbia, when this capital investment almost before the completion of the undertakings should be doomed to almost complete loss. But, however unfortunate this may be for the British investors, in British Columbia as elsewhere they must be prepared to meet losses, however severe, when it is obvious that they are due to the unavoidable conditions of progress. In such a case British Columbia and its people are no more at fault than those of any other portion of the world, not excluding Britain itself.

Neither British investors, however, nor those from any other quarter can be expected to take lightly the loss of their capital through bad faith, such as the illegitimate sacrifice of their interests as outsiders to inferior domestic claims because of their local influence or sympathies. Nor can they be expected to submit calmly to

the prospective scrapping of their costly plants after the capital invested in their construction has been gratefully absorbed in local expenditure, in order to make way for other prospective plants which will involve for a few years the expenditure of much new capital and thus procure a temporary return of good times. Nor will they appreciate the false kindness of any encouragement to continue at heavy annual loss a system of transportation or any other public utility which it is cheerfully declared in advance can never be restored to a paying basis, because the competing system which is the chief cause of its accumulating losses is destined to replace it as a much superior method of transportation. The only coldly self-interested, not to mention the only honest, method of dealing with a company placed in such an undesirable situation is not to encourage it in the continued sacrifice not only of its past investments, but of such existing reserves as it may have accumulated in more fortunate times. It should be encouraged to at once face frankly the inevitable and to save what is possible from the wreck of its investments. Moreover, in parting with the unfortunate investors who have themselves parted with so many millions of their capital, almost entirely expended in contributing to the past prosperity of the urban districts of Vancouver and Victoria, it were well to do so in a courteous if not a kindly manner. Doubtless there is some temptation to abuse those from whom we have received benefits too great to repay, particularly when there is little more to be expected from them. Even on the lowest grounds, however, it is poor policy to give way to such temptation. I feel convinced, however, that the great majority of the people of the chief cities of British Columbia do not endorse the bitter references to the Company and its investors which are contained in some of the evidence and arguments of those supporting the

jitney interests. Least of all will they subscribe to the sentiment that it matters little what investors in Britain may think of our treatment of them, because hereafter, in consequence of the great war, supplies of capital are to be sought in the United States.

**STREET CAR MUST ROW TO JITNEY OR
JITNEY TO STREET CAR**

If, however, the advocates of the jitney cause should prove to be mistaken in their estimates and the jitney should not be a form of transportation which is able to take the place of the electric street car, but can only at best, even in such developments of it as are in sight, act as a supplementary form of transportation, then the alternative proposition, recognized as such by the advocates of the jitneys, must be accepted. Instead of the electric street car being sacrificed for the preservation and extension of the jitney, the jitney should be sacrificed for the preservation of an electric service in the best interests of the public.

Though few of those who appeared before the Commission and practically none of those who faced the actual situation of the B. C. Electric were prepared to argue that both the electric cars and the jitneys can operate in competition with each other on the present basis without the elimination of the larger and more costly service, yet it is possible that a number of citizens, especially those who have not actually faced the facts, may be under the impression that these two systems can operate indefinitely in competition. Such citizens may at least have the conviction that under the ownership and superior management and economy of the respective city corporations and with access to the public purse it may be possible to operate the present electric service on a profitable basis, while permitting the jitneys to freely take what they please of the cream of the business.

If such an opinion should be at all prevalent, the way for such an experiment is quite open, inasmuch as provision is made in the charter of the Company for the City of Vancouver to take over at its option, within a couple of years, the street car service within its limits. In that case there should be no great difficulty in acquiring on similar terms of arbitration the outlying suburban sections, as was in contemplation under the tentative agreement of 1910. A similar solution applies to Victoria, where there would appear to be more conviction, on the part of the City Executive at least, that the citizens can afford to maintain a double system of transportation, not only in different sections of the city, which of course would be quite reasonable, but even in the same districts and upon the same streets. Should it therefore be possible to convince the majority of the ratepayers of either or both of the cities of Vancouver and Victoria that in spite of the experiences of the B. C. Electric it is both desirable and possible to operate a general street car system, serving at once the civic centres and the outlying suburban, industrial and residential districts, while at the same time freely permitting individual operators of jitney cars, in the care-free pursuit of their own personal interests, to take or leave what they please, and when they please, of the most profitable portion of the traffic, they have the opportunity to practically demonstrate their faith by their works.

This experiment, if undertaken by the civic corporations, has the added advantage that it can be conducted without the very serious risk to the suburban districts in particular of losing their street railway altogether, or to the inner districts of suffering from an inferior service. Miscalculations of municipal ratepayers, unlike those of a private corporation, can be made good out of their own

pockets through the simple process of increasing their taxes, even when their borrowing limits are reached.

However, assuming for the time that the majority of the citizens of Vancouver and Victoria and their adjoining municipalities, even if favoring the municipal ownership and operation of public utilities, are no more prepared than those of Edmonton and Calgary to permit private competitors, with nothing more at stake than a second-hand automobile, which the jitney operators tell us can, even in these dull times, be disposed of without loss, to freely exploit the cream of the city's revenue, the question simply narrows itself down to whether the jitney service or the electric street car service is to operate in the coast cities of British Columbia.

JITNEY CANNOT TAKE PLACE OF STREET RAILWAY SERVICE

An open-minded examination of the jitney service as it at present exists should convince anyone that, while it may be a useful supplement to an electric railway service, it cannot possibly take its place. That it is possible for a trackless motor bus system, installed and operated by a corporation with large capital and a highly organized and efficient staff, to take the place of the street cars on well-paved streets, is quite admissible. But this is simply to change from one great public utility corporation to another, and the change might as easily be made by the present corporation, the British Columbia Electric Railway Company, as by any other company, in simply substituting motor busses for street cars, as in the case of the motor bus company of New York and Chicago. This system, however, has nothing whatever in common with the existing jitney service except the one single feature that neither the jitneys nor the motor busses require tracks and trolleys. Whether the motive power should be in either or both cases

electricity or gasoline is merely a matter of experiment and local cost.

As is fully demonstrated in the origin and expansion of the jitney service, it involves no rational foresight or organization, no special investment of capital in lines from which it cannot be readily withdrawn, no guarantees as to rates and no special arrangements to meet the permanent needs of the public—in a word, no responsibility whatever, either personal or corporate, to continue in adequate form a service which has become one of the most permanent and vital requisites of a modern city. The attorney for the jitneys makes a special point of this capacity of the jitney to suddenly appear in great force, as in the case of the Seattle and other street car strikes, and to fade away again. In Victoria, as the evidence submitted by the jitney interests will show, the jitneys operate indiscriminately as jitneys and taxicabs. Their particular role at any given time is naturally determined by what fares can be collected under the one guise or the other. During the street railway strike double fares were collected on the jitney routes. On the other hand, a street railway system in a large modern centre of population is the product of years of organization and the investment of millions of capital in forms, the greater part of which cannot be converted to other uses and is therefore, at once a very heavy guarantee for the performance of its obligations and the highest possible inducement to afford where possible an acceptable service to the public, on whose favor it entirely depends. Were the street cars forced to discontinue, the citizens would be entirely at the mercy of an irresponsible service, both as to numbers in operation and fares demanded.

It may be said that as regards the fares, rules could be adopted regulating them, but as the present cash and taxi tariffs in most cities prove, this is a very inadequate remedy, and

in any case there is no regulation which can compel any individuals to remain in a service when they can leave it without any material sacrifice whenever something better turns up. Even under the compulsion of hard times the continuous fluctuation in the numbers of the jitneys and the easy coming and going of individuals in the jitney ranks are ample evidence of the unreliability of this system of transportation in any civic centre large enough to preclude working as a feasible alternative for those without private means of conveyance. If, apart from the difficulties and drawbacks above enumerated, the jitneys are to be taken seriously as a substitute for the electric car service, they would require to comply with the following conditions:

They would require to furnish regular transportation within the districts of Vancouver and its suburbs on at least as reliable a basis as the British Columbia Electric can furnish.

They must also guarantee transfers to any part of the city at the rates offered by the street car company.

They must carry school children and workmen on the same terms as the electric railway.

Also, in taking the place of the street railway and enjoying the privilege of using the city streets, they must contribute at least as much as the street railway towards the maintenance of the streets, the payment of civic and provincial taxes and the special contribution on the gross earnings to the city treasury.

They must furnish bonds to such an extent as will render claims for accidents and damages against them as certain of recovery as at present against the property of the Company.

As regards the special rates and concessions regarding fares and transfers which apply to the suburban traffic of the Company, inasmuch as these have grown up in a

fragmentary and isolated manner and are at present very complex, unequal and unsatisfactory, and therefore call for revision, the jitneys should not be asked to conform to such exceptional conditions unless they claimed to be able to fulfill these requirements as they stand, which it is admitted the Company cannot do. They may, however, be fairly asked to supply a suburban service as good as that of the Company, on as favorable terms to the public as the Company would be able to accept. In this proposition nothing is stipulated as to the interurban service beyond at least route No. 1, to New Westminster, or as to the service on the lines leased from the C. P. R., on the Burnaby Lake line or the Fraser Valley line to Chilliwack. It should, however, include the service furnished in North Vancouver.

NO POSSIBILITY OF JITNEY MEETING TRANSPORTATION REQUIREMENTS

Now, it requires only a statement of these conditions and a very superficial knowledge of the jitney service in Vancouver and elsewhere to realize that there is no possibility of these conditions being met by the jitney service in Vancouver were the electric railway forced out of business. Moreover, neither the legal representative of the jitney interests nor the most reckless advocate of the jitney privileges who appeared before the Commission has claimed that the jitneys, under either their present or reasonably prospective development, could comply with the conditions at present fulfilled by the Company.

Admitting the inability of the present jitney system to meet these requirements, all that is held out to the citizens of the Vancouver and Victoria districts is the vague possibility, based on the wholly unparalleled conditions of London and New York and on the guesses of certain writers about the beginning of the jitney "invasion," but which have not been followed up since the recess-

sion of the jitney wave, that following and improving on the jitney service there might result some form of trackless motor vehicles which might some day take the place of the present electric street car. As already indicated, however, in all such suggestions it is not the ordinary, irresponsible automobile jitney which is expected to take the place of the street cars, but some developed form of motor bus or car, properly closed in, seated, lighted and heated, and thus adapted to the regular conveyance of passengers at all seasons and at all hours. Such a vehicle, it may be observed in passing, loses all the special merits and attractiveness associated with the poor man's automobile and the joy-riding proclivities of its patrons. Though there have been several experiments with different types of motor cars in American cities, they have not been able to compete successfully with the electric street cars, though some of them have been maintained either by the street car companies themselves or by independent operators, as furnishing a very suitable supplementary service beyond the street car lines. It is true that motor bus services have been successfully developed in some of the older and larger cities of Europe, where the contour and varying widths of the streets do not lend themselves to the operation of electric tram cars, as also in some of the larger cities of America, where, as in New York and Chicago, every possible form of transportation — above, on and below the streets — is employed to deal with the ever increasing volume of traffic. In these cities, however, the trackless trolley bus is employed as a supplementary service, especially on streets where it is not convenient or desirable to have trolley wires and trucks, as also in parks and on driveways, for similar reasons. In other large cities, especially those like San Francisco, where municipal ownership of the street car service is making headway,

the tram car is occasionally adopted as a supplementary service in order temporarily to meet the requirements of the newer city and suburban districts where it would not be profitable, for a time at least, to lay and operate the regular trolley line. In all such cases, however, experience shows that neither the jitney nor even the motor bus is seriously regarded as a practical alternative to the regular street car service. It may be noted that while there is throughout the United States and Canada a very general agitation for an increase in transportation rates, both local and general, in order to meet the increasing cost of labor and equipment, yet in all the necessary expansions of the street railway service there has been no serious suggestion, in America at least, as to the substitution of other methods of transportation for the electric street car.

ORGANIZED SYSTEMS MUST PREVAIL IN
THE END

Even should some form of motor service ultimately replace the electrical trolley, as argued by the jitney interests, it must be conducted, as experience everywhere proves, either by responsible joint stock companies or municipal corporations. In either case the independent individual jitney owner, in whose interests the whole argument before the Commission was presented, must be eliminated. It is difficult to see, therefore, what advantage there is in throwing out of employment that large and respectable class of citizens of Vancouver and Victoria districts who constitute the employees of the British Columbia Electric Railway Company, merely to insure the temporary support of a limited number of independent operators of jitney cars, who cannot guarantee, either for themselves or each other, that they will furnish a reliable service for the citizens of those districts, and who in turn must be supplanted by large and permanently responsible capitalist cor-

porations. These in turn must develop other well-organized systems with a body of employees under normal and satisfactory conditions, with the customary regulations as to hours, rates and the many other terms embodied in agreements between employers and employees. What demoralization the financial and commercial interests of the coast cities must undergo, what wreckage of values far outlying residential properties, what hardships and inconveniences to the general body of citizens must be endured to effect the transition from one capitalist organization to another, through an irresponsible jitney interval, one can only leave to the individual judgments of those who would chiefly suffer.

The attorney for the jitney interests made some considerable attempt to show that there was virtually a conspiracy between the Company and its employees by means of the strike in June to demonstrate to the citizens what they must suffer should the street car system be closed up. Probably the argument was not intended to be taken very seriously. The basis of it was entirely repudiated by both the Company and its employees. Assuredly it involved a rather severe reflection on the general intelligence of the parties accused. Had they any such design in view, it would have been the height of folly to stage their performance at a time of the year most favorable to the jitneys and most disadvantageous to themselves. A few months earlier, say in January or February, when the weather and street conditions were most unfavorable to the jitneys, they might have demonstrated, if that were necessary, how difficult it would be for the jitneys satisfactorily to serve the transport needs of the districts of Vancouver and Victoria, even at ten-cent fares. At the same time, as has been demonstrated very fully in Los Angeles and other American cities where the existence of a street car

service has been threatened by jitney competition, the employees of the street railway, recognizing that their means of earning a living was directly at stake, have taken a very special interest in the problem and have, very naturally, done what they could within their legal rights as citizens to demonstrate to their fellow-citizens the folly of sacrificing at once the means of life for a large and permanent section of the citizen body and the interests of the majority of

the residents without private means of conveyance, in their indispensable need for an adequate transportation service. Hitherto the employees of the B. C. Electric have taken but a very modest part in the protection of their own interests, apparently assuming that their employers on the one hand and the City Council representatives and general body of the citizens on the other, in safeguarding their own interests would protect those of the employees of the Company.

IV. THE INTERURBAN JITNEY

NO GUARANTEE JITNEY LINE WOULD REMAIN IN BUSINESS

Two services cannot co-exist. Commissioner finds that free-lance competition might undermine present jitney line, which has not the stability of company with large investments. Intermediate or local traffic requires the B. C. Electric, which cannot meet its operating expenses, far less pay dividends, in face of competition.

IN dealing with the jitney competition in the City of Vancouver and district it has been stated that the only route on which a fairly uniform service was maintained was that of the so-called Blue Funnel Line, between Vancouver and New Westminster. For several reasons it is necessary to deal with this separately.

The Blue Funnel Motor Line Company, Limited, is a somewhat peculiar institution. It is a registered company of the Province of British Columbia which appears to have been incorporated early in 1916. According to the statements filed by the manager, Mr. Coldicutt (see Exhibits 46 and 46A) the general impression would undoubtedly be conveyed, and was that first obtained by the Commission, that the company owned and operated a large number of cars, some forty-one in number, and was a quite stable and responsible institution, financially and otherwise. Some doubts having been cast on the tenor of the first statements, Mr. Coldicutt was asked for a supple-

mentary statement, certain points being specified on which special information was desired. This was furnished some time later (see Exhibit 119). In this it was stated that eight of the cars were owned by the Blue Funnel Motor Line, Limited; but on further questioning, Mr. Coldicutt finally admitted that none of the cars was owned by the company, but that they were owned by three shareholders, Messrs. T. D. Coldicutt, George E. Neilson and Q. McGill. Mr. Coldicutt owned three; Mr. Neilson, or his wife, Maggie Neilson, in whose name it appears they registered, owned three; and Mr. McGill, two. Mr. Coldicutt's explanation of the misleading statement in the exhibit submitted was an attempt to maintain that as the cars were owned by stockholders of the company they were owned by the company—a statement which implied a degree of ignorance of elementary business principles of which in no other respect did Mr. Coldicutt give any evidence; certainly not in his organization and

management of his transportation business. The other twenty-three cars connected with the organization are owned by a number of independent individuals, who, however, in the operation of their cars are under certain agreements with the members of the company and subject evidently to the general management of Mr. Coldicutt. For the privilege of operating under the aegis of the Blue Funnel Line and under the very competent management of Mr. Coldicutt the individual owners pay certain allowances to the company, out of which the common expenses are met, such as advertising and the leasing of offices in Vancouver and New Westminster as terminals for the cars and rendezvous for their patrons. Beyond the value of the individual automobiles the members of the company and those associated with them have very little at stake. One thousand dollars is given as the value of the auto supplies and equipment on hand. A further sum of \$2,500 is included under the head of "Office leases and equipment." An office lease, however, is about as vague an asset as a municipal tax, except in so far as it is paid in advance, and very few such assets are acquired in that way. The important point, however, as affects the public interest in the matter is that on the best showing which can be made the members of the company and the persons more or less loosely attached to them have very little at stake in the business except their automobiles. These, however, are rapidly depreciating, since, owing to their constant service, they have an average life of little more than a year, with frequent repairs and replacements of tires in the meantime.

Apart from the management itself, which is practically altogether in Mr. Coldicutt's hands, there is little anchorage in the business on the part of the other individuals associated with it. In other words, they would require to sacrifice but little in leav-

ing the road for some more lucrative or attractive occupation. Under ordinary circumstances this is a matter of no special importance to anyone but the individuals concerned, but when a very considerable number of persons come to depend upon the regular service of such individuals, the lack of any guarantee for permanent service is a serious matter. This lack of any guarantee of stability in such an organization goes far to account for the apparent ease with which, in the past two and a half years, some ten other combinations of automobile owners and would-be managers entered into competition with the Blue Funnel Line and passed out again as rapidly and easily when they found Mr. Coldicutt's energetic and aggressive business methods too strong for them. The history of the situation as outlined by Mr. Coldicutt himself plainly demonstrates how little reliance the public can place upon the stability of any such service. Such stability as there is, is found to depend upon individuals.

It is quite evident from what the Commission was able to learn, both directly and indirectly, of Mr. Coldicutt's management of the Blue Funnel Line, that he possesses exceptional ability as a shrewd business man and has devoted himself with untiring energy and aggressiveness to the organization of the motor traffic which he has established. He has certainly built up a very loose but quite unique system of correlated automobile routes, centering in New Westminster and connecting with Vancouver City on the one hand and some six other points radiating from New Westminster on the other. These furnish a very convenient and evidently acceptable means of travel for many persons who previously enjoyed few or no other convenient means of transport. Only on one section of the system, that between Vancouver and New Westminster, is the Blue Funnel service in competition with the B. C. Electric. As Mr. Coldicutt

claims, his is a through line, not undertaking to convey passengers to or from intermediate points except incidentally to the terminals and when arranged for by telephone.

ONE OF TWO SERVICES—JITNEY OR ELECTRAIC—MUST GO

An examination of the passenger traffic conditions between New Westminster and Vancouver will indicate that much the largest and most profitable portion of the traffic is the through service between the central portions of the two cities. In accordance with the free lance system of the typical jitney traffic, this is the portion which alone is sought by the Blue Funnel Line, leaving the more irregular, sparse and unprofitable traffic of the intermediate region to be served by the B. C. Electric or any other parties, private or corporate, who may care to attempt it. It being recognized that the Blue Funnel Line frankly confines itself to the most profitable section of the traffic, it furnishes for probably the greater part of the year a quite convenient and attractive service, with those special attractions in summer incidental to automobile riding, and which have been already referred to. Being unhampered by intermediate traffic, the transit is commonly made in a shorter period than that taken by the Company's cars. The somewhat greater expense of the Blue Funnel fares, being a uniform rate of 25 cents for all persons and periods, does not affect the necessary number of persons to furnish patrons for the line. Obviously, so long as the Blue Funnel Line confines itself to the most profitable through traffic, and the B. C. Electric, with its costly and permanent service, is able and willing to subsist on the cheaper and more scattered service, with such elements of the other as find it more comfortable or convenient at certain times and seasons to avail themselves of the service which is always there, the public will be in the exceptionally de-

sirable position, as far as the through traffic is concerned, of having two alternative methods of transportation more or less constantly at their service. The only serious question which arises, therefore, is the familiar one: Can these two services co-exist, the one available at all times for all forms of service, and the other furnishing only a specialized feature of that general service required by all elements, available while it is in operation, the duration of which depends upon the individual who happens to be the maintaining principal at the time? If so, then there is practically nothing more to be said, except to congratulate a limited section of the population on the quite exceptional good fortune which it is able to enjoy.

Unfortunately, however, such very exceptional conditions are impossible of continuance. The most ample evidence is furnished to prove that it is impossible for at least the British Columbia Electric to continue to meet its operating expenses, much less to pay any dividends, out of the section of the through traffic left to it, together with the local and intermediate traffic, most of which is at special low rates. This is demonstrated in many special returns giving every phase of the traffic conditions and the financial results for the company. See especially Exhibits 88, 96, 97, 98, 100, 107 and 145, and Proceedings 9 and 10. As always under such conditions, one of three alternatives must result: The partial services of the automobile cars must be eliminated and the local fares revised, or the B. C. Electric Company must abandon the service, or the City of Vancouver, as the dominant municipal corporation, must take over the B. C. Electric transportation service and make such arrangements as are necessary with the municipalities affected and finance the enterprise as a municipal obligation.

That the Blue Funnel Line could

continue its present service, and even enlarge it, after the elimination of the B. C. Electric, goes without saying, though even in that case there are certain obvious minor difficulties to be encountered which would doubtless bring it into disfavor the moment a ready avenue of escape were closed. But it is perfectly obvious that the Blue Funnel Line has neither the financial resources nor the capacity to furnish any reliable guarantee as to undertaking the full service now rendered by the British Columbia Electric. If with the lightness of a promise that involves no loss when broken, it should undertake to speculate with some of the most vital interests of the citizens, there is nothing whatever to guarantee the success of the venture, and in the very serious event of failure practically all of the loss must be borne by the citizens, who are left stranded without remedy. After what has already been said, this point need not be further enlarged upon.

The Blue Funnel Line, however, as hitherto, may successfully conduct its numerous non-competitive routes beyond New Westminster. In so doing it has undertaken to furnish a very modest, but naturally much appreciated service in regions which previously had little or no service of any kind. It is not, therefore, called upon to take the place of a much more frequent and responsible service, which it had been the means of destroying. In supplying transportation needs where they were wanting before, the Blue Funnel Line is meeting a very real want and adding to the wealth of the country, without the danger of supplanting a greater benefit than its own. In doing so, however, it will doubtless develop under Mr. Coldicutt's able and efficient management into a service which will require for its gradual expansion, and in proportion to the patronage which it receives, the collection and investment of considerable permanent capital in buildings

for offices, shelters, garages, stores, repair shops, etc., which will furnish that guarantee of stability and duration necessary to encourage local investors to develop new enterprises and industries in the safe dependence upon a permanent and reliable means of communication, without which their investments and developments would be ruined.

EVEN JITNEY SERVICE WOULD BE JEOPARDIZED BY COMPETITION

But every progressive step taken by Mr. Coldicutt's enterprise, involving capital expenditure on which a reasonable return must be obtained in order to ensure either its continuance or its expansion, would place his service to exactly the same extent at the mercy of free lance car drivers with nothing at stake but a rapidly depreciating automobile, and who sought to share in the most easily obtained returns from the traffic which was built up in consequence of his permanent and well-developed service. If such free lances were permitted thus readily to encroach upon his income at their own convenience, Mr. Coldicutt knows very well what would become of his business and its investments. Already, indeed, on the very threshold of his attempts to build up a co-ordinated and effective business, at the expense of the heavy investments of the B. C. Electric, he is finding other free lances who are seeking to exploit his small organization. They are endeavoring to obtain the benefit of his management and very modest equipment without contributing their share towards the common expenses of the management and Mr. Coldicutt's very legitimate allowances for the exercise of his business and organizing qualities. Every step in advance which he makes will simply add to the inducements to these free lance competitors or pirates, as he naturally enough names them, to exploit the profits of his establishment. Undoubtedly, in the new lines which

Mr. Coldieutt has opened up in the regions not now served by similar means of transportation he should be entitled to protection for the developments which he introduces, and which, if properly conducted, will be of mutual advantage to his organization and the public. But the costly and highly developed services which the B. C. Electric has built up on a complex basis essential to all stable forms of modern transportation cannot possibly continue to be conducted on that basis if free lances, whether in the shape of five-cent jitneys or twenty-five-cent Blue Funnel busers, are permitted to rifle the traffic of its most easily obtained and most profitable revenues, leaving to the Company all its heavy capital expenditure and the most costly and least remunerative of the already shrunken street railway business.

PUBLIC UTILITY REGULATION BY COMPETITION WASTEFUL

It required many years to convince the people of America that there were a number of very essential public utilities which could only be conducted in a manner in the long run satisfactory to all parties interested when they were treated in practice, as they were in point of necessity, as natural monopolies. So long as competition was believed to be the only feasible regulator of trade in a free community, the people of the United States and Canada squandered hundreds of millions of wealth in futile attempts to maintain competition in the same civic centres between rival waterworks, gas works, street railways, and in their earlier days, telephone and electric service plants. However, many years of civic corruption, wretched services, shackled enterprise and forbidden improvements, financial embarrassment, company reconstruction, ending in serial bankruptcy and wastepaper shares, at last taught all those who had any knowledge of business affairs, and who

eventually convinced most of their fellow-citizens, that only as natural monopolies could these enterprises be properly conducted; and so they are conducted today in nearly all of the progressive American and Canadian centres, while in most of the others the competing utilities are on the way either to bankruptcy or amalgamation. Two alternative avenues of escape were followed from the demonstrated futility of competitive paralysis. One is civic ownership and operation of indispensable utilities, and the other is private corporated ownership and operation subject to supervision in the public interest by a public utilities commission. These are both good when the civic administration is good and when the public utilities commission is wisely selected. They are both bad when the opposite is the case. But even in the latter case they are very seldom so bad, at least in their permanent results, as under free competition. As a condition, therefore, of protecting the British Columbia Electric within the fields of natural monopoly already granted to it as a condition of its large capital expenditures, and as a sound reason for protecting from destructive competition Mr. Coldieutt and his company, if it should develop into a real company, in opening up new routes by their automobiles and ultimately developing into an adequate system of rural and interurban transportation through unoccupied territory, it will be necessary to bring them both under the regulation of a public utilities commission, which will only, however, protect their rights when they are operating in harmony with the best interests of the community. This will be taken up more fully later.

It being deemed necessary in view of the facts as elicited that in the best interests of the citizens of Vancouver and district, since the B. C. Electric Company's street railway

service on the one hand and the jitney service in Vancouver City and the corresponding service between Vancouver and New Westminster via Kingway on the other, cannot be maintained in the same field of opera-

tion, the former shall be maintained and the latter eliminated, the chief remaining points to be considered are possible readjustments and improvements in the affairs and services of the Company.

V. FARES, SERVICE, ONE-MAN CARS

IMPROVEMENTS RECOMMENDED BY COMMISSIONER SHORTT

Revision and simplification of fares necessary. Conference proposed with municipal representatives as to fares, transfers and service. Trial of one-man cars urged. Skip-stop plan of operation and through cars to New Westminster among recommendations.

(a) *Suburban areas should bear, not the full, but some approximate cost of service given.*

THOUGH recognizing the serious financial condition of the Company as regards its transportation service, and notwithstanding the urgent appeal being made by many street car companies throughout the continent for a general increase in street car fares to meet the increasing cost of operation, it is not recommended that the present standard fares in the City of Vancouver should be increased. In relation to the peculiar conditions which have developed in several of the adjoining municipalities, most of the detailed information on which will be found in Exhibits 57 to 102 and 110 to 114, and Proceedings 8 and 10, special arrangements as to fares were made from time to time, and the special concessions which were granted in the matter of transfers were obviously not considered in relation to the permanent conditions which were likely to be established when the more or less speculative and prospective future of these districts should be settled. As a result of the hasty and tentative arrangements entered into during the days of rapid expansion and the overflow of municipal boundaries, we have an intricate and impracticable system of normal fares,

with all manner of special concessions and privileges, only some of whose interesting and attractive possibilities in combination, even the citizens most familiar with them have as yet fully worked out. It is impossible to summarize this tangle of rates within limited compass, but certain general concessions may safely be arrived at. In the first place these rates must be revised and simplified with a view to rendering them more uniform and equitable alike as to the Company and the citizens.

As a basis factor in the rearrangement it is quite obvious that, as previously observed, the central city population of Vancouver, taken in the sense of an unbroken continuity of the fairly compact city blocks and residential areas, extends at various points, such as the Shaughnessy Heights section of Point Grey, beyond the formal city limits of Vancouver. In other sections, as in most of the Hastings Townsite, recently brought within the city limits, much of the area is very sparsely settled and does not come within the reasonably well settled city population area referred to in this connection. In prescribing an area, therefore, within which uniform rates for the

various classes of city tickets should be established, with free transfers on continuous trips to all other parts of this area, the population limits should be taken, not the restricted municipal limits of Vancouver City. At the request of the Commission Mr. Murrin has prepared a map of the city (Exhibit 155) showing the limits suitable for such a central free transfer area. The proposed limits, as looked at from the point of view of the existing car lines, appear to be very reasonable and fair, but should be submitted for consideration at the time of the conference proposed below, with reference to the readjustment of rates on the suburban lines. Beyond these limits we have to deal with the suburban areas proper, and for these rates must be arranged on the street railway lines which serve them which will bear, not the full, but some approximate relation to the cost of the service rendered. In practically all cases this will involve the cancelling of transfers from urban or interurban lines to city lines—meaning, of course, by the city lines those within the city population area already referred to.

In the charters granted to the British Columbia Electric by the municipalities adjoining Vancouver, or in subsequent agreements, certain special settlers' rates, carrying with them the right of transfer to city lines, were granted to residents of these municipalities. It was found, however, that owing to subsequent provincial legislation, these tickets could not be restricted to the permanent residents. Hence the rates became common on all lines of the Company.

In the discussion of relative fares it is assumed that while the cost of the service, under the principle of its being a natural monopoly, is adjusted mainly to the total cost of the system and not to the cost of operation of each section, yet the reasonableness of charging a higher fare

for longer distance and sparse settlement is partly due to the greater cost of service per passenger and partly to the economic advantage which the passenger enjoys in the lower cost of living in suburban areas. Thus lower rents and other economies are balanced against higher cost of transportation and a few other special services. Should, however, the municipalities or the Company insist upon the letter of the charters, the municipalities may refuse to admit of any modification of the rates conceded to them when economic prospects were brighter. Under such conditions the Company on its part may cease to operate any of the lines found to entail too heavy a loss. In such an event the municipality may either take over the line at a valuation under arbitration, or order the Company to take up its tracks and grant the right of operating the line to some other company. Under present conditions neither of these alternatives would be of any advantage to the citizens, who would find themselves entirely deprived of a service upon which the value of their property and the convenience, and in some cases the necessities, of their lives depend. It is evident, therefore, that an adherence to the letter of the charters will afford no solution of the present difficulties, which involve the alternatives of an insuperable financial loss to the Company or an entire suspension of street car transportation to the districts in question. In the face of such a situation, the only reasonable solution would appear to be that the representatives of the municipalities affected, namely, Point Grey, South Vancouver and Burnaby, should confer with the management of the Company with a view to the recognition of the limits of the city population area above referred to and the consequent readjustment of fares, transfers and time tables, or any other details which they may

mutually agree upon. At such a conference there is no doubt that at least temporary arrangements might be made which would enable the Company to continue a reasonable service on practically all of its outlying lines. When improved conditions returned for any or all of these suburban districts a corresponding im-

provement in fares, frequency of service and transfer privileges should be made. In the meantime, should a public utilities commission be appointed, it would naturally constitute the proper authority to fix suitable times and conditions for a return to lower rates and more extended privileges.

(b) One-man cars recommended for shuttle lines. Better to reduce number of men than shut down lines.

Reference may be made to economies which the Company may be able to introduce with a view to lowering costs of operation without materially reducing the quality of the service. Apart from the exercise of a more rigid economy throughout all the departments of the transportation service, as of the others, and in the number rather than in the quality and remuneration of the employees, trial should be made of the one-man car. This could be tried at least on all the shuttle lines operated, and as far as possible on the outlying routes where the lightness of the traffic should render it quite possible of operation. The Commissioner visited Calgary, where the operation of one-man cars has been developed to the greatest degree in Canada. Much information was obtained from Mr. Thomas H. McCauley, superintendent of the Calgary Municipal Street Railway, who introduced and developed the system there. Detailed information as to the nature, construction and operation of the one-man cars in Calgary and the outcome of the experience there was obtained by the Commissioner from Mr. McCauley and is included in the papers accompanying the report, as Exhibit 148. This includes also the agreement between the Calgary Street Railway Department and the employees with reference to the operation of the one-man cars; also a copy of a letter from the Brill Company, of Philadelphia, to the

Superintendent of the Moose Jaw Electric Railway Company, giving particulars as to the operation of one-man cars in the United States, with a comprehensive list of articles on the subject in the *Electric Railway Journal* and other publications. Doubtless some allowance must be made for Mr. McCauley's enthusiasm for a favorite project. Even after enjoying the privilege of having all the advantages of the one-man car and the corresponding disadvantages of the two-man car set forth by an ardent advocate of the former, one may still have doubts as to the possibility of the plan in handling the traffic in congested areas of a city of any considerable size. As to the practicability of the plan, however, for outlying and more sparsely settled districts, there can be little question, while as to the advantage of it in point of economy there is still less. As to the special sections of the Company's lines within the Vancouver district to which the one-man car might be applied, Mr. Murrin at the request of the Commissioner has furnished a statement, with a list of possible routes appended and an estimate of the savings which might be effected by this change.

On the other hand, the Commission received from Mr. J. Hubble, president of the Vancouver section of the Electric Railway Union, a statement indicating the attitude of the motormen and conductors in the service of the Company with reference to the

possible introduction of one-man cars (see Exhibit 149). As has been the case in practically all other centres when the change was first proposed, and indeed for some little time after its introduction, the employees look upon the change with disfavor. That the change would involve some reduction in the number of employees is obvious, though were the jitney competition abolished the balance would probably be readjusted. It were better, however, to reduce the number of men, while increasing somewhat the remuneration of those operating the one-man car, than to suffer loss of employment for a considerably larger number in virtue of the enforced closing of sections of line by reason of the heavy loss in operation.

Of the reasons given by the employees for their opposition to the prospective change, most stress is laid on the probable increase of danger in various forms. Practically the only other feature urged is the reduction in speed. In summing up their position they claim that the one-man car "where at present in operation has been a failure and is opposed by

(c) *Speed limit too low; stops too frequent; through service recommended.*

A desirable improvement in suburban traffic would be a reduction in the time taken to reach certain outlying districts, particularly on the route from Vancouver to New Westminster and through it to the further outlying districts, especially on the New Westminster and Chilliwack route. While the present speed limit prescribed in some of the charters is obviously too low, yet part of the delay, especially between Vancouver and New Westminster, is due to the constant stoppages at street corners once the car enters the Vancouver City area. In other words, every interurban car or train of two cars, in passing through the more thickly peopled parts of Vancouver, is re-

quired to act as an ordinary street car instead of being operated as nearly as possible as a through car line, leaving the local city traffic to be taken care of by the ordinary street cars and some of the unimportant intermediate stops to be served by special cars.

both the public and the men who operate them." This conclusion, however, like many of the other claims as to certain elements of danger, does not seem to be borne out by the facts, either in Canada or elsewhere. Apart from the very practical experience of Calgary, where, it is true, these cars were much opposed at first, but are now quite favorably received, we have numerous reports from various places in the United States as to the acceptable nature of the service rendered by them, with hitherto diminished accidents. The experience of fifty different electric railways in the United States and Canada in which there has been a complete or partial employment of the one-man car has been summed up and the results have been given in the *Electric Railway Journal* of April 21, 1917. A copy of the article in question is included as Exhibit 150. Certainly, whatever may be said as to the wisdom of employing the one-man car for the general traffic of a city, there appears to be no sound reason against its use on the lighter runs, and more particularly as an alternative to abandoning much-needed routes.

quired to act as an ordinary street car instead of being operated as nearly as possible as a through car line, leaving the local city traffic to be taken care of by the ordinary street cars and some of the unimportant intermediate stops to be served by special cars.

A plan for the improvement of the service in point of speed between Vancouver and New Westminster and the district beyond has been prepared by Mr. Murrin at the request of the Commission and is included as Exhibit 147. This indicates that pending further and more far-reaching plans for an improved through service, the present service might be bettered by a combination of higher

speed and the skipping of many ordinary street corner stops. Were these proposed improvements introduced in the meantime, it would greatly facilitate the through service

on the most important interurban route of the Company and practically take away any advantage which the through motor cars have in point of speed.

VI. VICTORIA AND VANCOUVER ISLAND

ECONOMIC CONDITIONS SIMILAR TO THOSE OF VANCOUVER

Dr. Shortt points out necessity that Company should be able to exist in order to give service. Jitneys to go from competitive routes. Recommends revision of charter. But public utility system cannot be expected to meet increased prices and diminishing revenue and have its most profitable business taken away.

THE fact that the public utilities of Vancouver and district on the mainland and those of Victoria and district on Vancouver Island are operated by the same company from a capital fund, under the same general management and under the same general policy, as also under similar physical conditions and in practically the same general economic atmosphere, renders the general considerations and discussion of the conditions under which both districts are served equally applicable to both. At the same time, owing to the complete physical separation of the two districts and the consequent necessity for the construction and operation of two quite distinct sets of plant, and the further fact that the charters under which the company operates in the two districts are dissimilar in certain fundamental features, it was deemed advisable and necessary, as far at least as the points of dissimilarity were concerned, to treat Victoria and district independently of Vancouver and district. It was also the natural and reasonable desire of the Mayor and Council of Victoria that separate consideration should be given to their conditions. Accordingly, special sittings of the Commission were held in Victoria, the final one, however, by mutual consent, in Vancouver. At these the investments and operations of the Company in

Victoria City and district were fully set forth and the representations of the City Corporation and the jitney interests duly received. For the purposes of the present record and future reference, a separate set of exhibits and record of proceedings was prepared for Vancouver Island. Many of these, as relating to the whole system of the Company's operations, are duplicates of the Vancouver set, but many others are independent and apply to Victoria and district only.

In this report it will not be necessary to repeat what has been already given with reference to the general conditions under which the British Columbia Electric operates in both sections of the province. What follows, therefore, will have special reference to the conditions in Victoria and district.

In the first place, the special charter, with its amendments, under which the Company derives practically all the powers which are not conferred by its provincial license and the general laws of the province, differs in many respects from any of the charters on the mainland. This is chiefly due to the fact that when the Company took over the public utilities of Vancouver Island they were operated under a charter which dated back, in the case of the gas company, to 1860, and in the case of

the electric railway and light and power service to the year 1888. As regards the latter the present situation and its evolution may be summarized as follows:

The agreements under which the Company carries on its business in the City of Victoria and in the adjoining municipalities and districts are embodied in a provincial act of 6th April, 1894, and an amending act of 1910. The act of 1894 refers to an agreement dated November 20, 1888, between the municipal corporation of Victoria and certain designated individuals. The latter were authorized to construct and operate a street railway within the limits of the city. These parties were then incorporated under the provincial Companies Act, with power to build and operate an electric railway and supply electricity for light. This company was named the National Electric Tramway and Light Company. By a subsequent act of 1890 the company was authorized to construct and operate tramways in the districts of Victoria, North and South Saanich, Lake, Highland, Esquimalt, Sooke and Metchosin, and connecting with its lines in Victoria City. The acts embodying these franchises and agreements were consolidated by the act of 1894 and the name of the company changed to the Victoria Electric Railway and Light Company. All rights and obligations under the previous acts were conserved except in so far as modified and enlarged under the act of 1894.

The capital of the company was designated at \$1,000,000, but it had the right to expand its capitalization and to sell fully paid up and non-assessable shares at less than their nominal value. The usual rights were granted to lay single or double tracks on the city streets and bridges, subject to the approval of the City Engineer as to their location within the city limits and to the approval of the Chief Commissioner of Lands and Works in the surrounding dis-

tricts. The services to be rendered by the company included the carrying of passengers, freight, express and mail matter, but without any limitation as to the streets over which any of these services might be conducted. The company is not required to construct or maintain any portion of the city streets further than when laying or repairing its tracks to leave the road-bed in as good condition as before disturbance and to maintain it in that condition between the tracks and for eighteen inches on either side of them for three months after construction, subject to the satisfaction of the City Surveyor. The company had also the necessary authority to operate electric light works. It might receive grants in money or lands, from individuals or corporations, including municipalities, and these might hold shares in the company or exempt it from taxation.

When the British Columbia Electric Railway Company took over this company, under authority of its license granted in 1898 it acquired all these rights and privileges. They remained unaltered until 1909, when the City of Victoria and the B. C. Electric entered into an agreement, dated August 9, ratified August 26 by the necessary two-thirds vote of the ratepayers of the city. The act to validate this agreement was passed March 10, 1910.

Under this agreement, in consideration of certain extensive capital investments which the Company undertook to make for the benefit of the City and adjoining districts, the City of Victoria, in terms applicable to the City of Vancouver from 1900, agreed that it should not, prior to 1938, undertake to purchase, construct or operate any works similar to those then carried on by the B. C. Electric Company until the City Council had by bylaw fixed a price at which it would take over the property of the Company, allowing the Company thirty days within which

to accept or reject the offer or call for an arbitration of the price. In this agreement, however, the City retained its right to authorize any other company to enter into competition with the B. C. Electric, but not the right to bonus or exempt from taxation any such company. The City also preserved the right to construct and operate any system of light or power for its own corporate use, but not for sale.

Should the Company within thirty days after the offer of the City decline to accept the price proposed or fixed by arbitration, the City Council may exercise its full powers under the Municipal Clauses Act. The obligations which were undertaken by the Company on its part included the erection within three years and the subsequent maintenance of a power plant tributary to the City of Victoria, with a capacity of not less than 10,000 horsepower, at an estimated cost of \$1,500,000. This electrical power was to be employed in the extension of the railway, light and power undertakings of the Company in and around the City of Victoria. When the new plant came into operation the rates for light and power within the City of Victoria and in the districts around it should not exceed those charged in Vancouver City and adjoining districts respectively. A schedule of these rates was appended to the agreement. The Company also undertook to furnish the City of Victoria and deliver at its city light station, electricity for its own corporate use, but not for sale, at one-half the cost of production by the existing city plant. The Company also undertook to spend within three years a further sum of not less than \$250,000 in extensions to its undertakings within the City and district of Victoria.

CHARTER OF COMPANY SHOULD BE BROUGHT UP TO DATE

Much of the strong language which is customarily employed in the

supposed interests of their clients by lawyers who are otherwise gentlemanly persons will be found in the case presented by the City Solicitor of Victoria in criticizing certain clauses in the charter of the original company. Even the B. C. Electric Company itself would appear to be more or less disgraced by operating under such a document. One of the modern grievances is that the original company had surreptitiously acquired the privilege of conveying freight over its lines, yet anyone who reads section 16 of the act of 1894 must recognize that this right is plainly inserted in the section, which specifies what the services to be rendered by the company shall be, namely, the conveyance of passengers, freight, express and mail matter. It appears, however, that the B. C. Electric Company does not avail itself of several of its rights under the charter; also that it gratuitously grants certain privileges not legally required of it, such as carrying free infants in arms, firemen, policemen and other city officials, also children under twelve years of age at half fares and school children and workmen at special rates. The Mayor of Victoria, however, resents the acceptance of these privileges as matters of grace when he might have the pleasure of demanding them as legal rights.

That the franchise under which the Company operates in Victoria and district is antiquated and unsuitable to modern conditions is obvious enough. If, therefore, the Company is to be permitted and encouraged to continue its services to the City, it should on its part be willing to accept such a revision of its charter as will assure to the citizens of Victoria the same legal rights and guarantees as enjoyed by the citizens of the mainland in such sections as Point Grey and North Vancouver, which are practically the same as those provided for in the charter of Vancouver City, with the exception

of the special financial arrangements, such as the percentages of gross earnings payable to the City treasury and which are incident only to a large centre of population. Doubtless Victoria at some time in the future, under improved economic conditions fostered by enlightened and progressive civic policy, will expand to the point at which the revenue from an efficient street car system, whether in the hands of the City Corporation itself or in those of a private company, will be such as to justify a suitably graded contribution to the general expenses of the City; but it has plainly not reached that stage at present. In the meantime, however, by such changes in the charter as indicated, Victoria City would obtain control over the location of future extensions of the street railway system; would secure the future maintenance of the road-bed under the railway and for eight inches on either side of the rails in as good condition as the remainder of the street; would have the rates of fare legally specified, the use of bridges and the conditions for hauling freight subject to mutual agreement between the City officials and the Company, and quite generally have such definite control over the City streets and other City property as is implied in the fact that in all arrangements reached the City officials would have to be satisfied as to the conditions to be fulfilled on both sides.

It is very evident that the first condition of the B. C. Electric Railway Company, as a transportation company, being able to comply with

all the conditions of a revised charter acceptable to the City, is that the Company itself shall be able to exist at all. It is perfectly true that the Company, in the face of the unfortunate economic conditions of the Pacific coast cities since 1914, must expect to face temporary economic sacrifices in common with other non-speculative institutions. It is, however, quite unreasonable to cite either the gains or the losses of real estate dealers as a basis of comparison with such a stable and continuous utility as a street railway service. That the operations of dealers in real estate must be continued without intermission no one will seriously suggest, but that the transportation needs of the citizens of a modern civic centre, who have adjusted their daily lives to this service, should be carried on steadily and continuously, alike through periods of prosperity and depression, calls for no proof. Merchants and others who cater to the daily wants of the citizens in other lines must also continue their services, and in doing so the prices of their goods and the rates of their services are determined on the basis of what it costs to meet the requirements of the citizens. We are all painfully aware that these prices and rates have been steadily advancing. In the face of present conditions it is impossible to expect that a public utility system can itself meet increasing prices of supplies and rates of wages, as also a diminishing revenue, from greatly reduced numbers of patrons and less spending power on the part of those who remain, and in the very midst of such a crisis have a large part of its most profitable business taken away.

"The most ample evidence is furnished to prove that it is impossible for at least the B. C. Electric to continue to meet its operating expenses, much less to pay any dividends, out of the section of through traffic left to it, together with the local and intermediate traffic, most of which is at special low rates."

COMPETITIVE JITNEYS MUST GO

Company cannot continue transportation on present basis. Useless for City of Victoria to talk of improvements in charter without assuring Company of conditions under which it might operate, if not at a profit, at least at no material loss.

BOTH Mayor Todd and City Solicitor Hannington declared, professedly on behalf of the citizens in general, that the City of Victoria is unwilling to eliminate the jitneys, and the chief reason seemed to be that they furnished transportation for certain districts of the City which were not served by the street cars. So far as these districts and routes are concerned, the claim is perfectly reasonable and just. It is very far from the mind of the Commissioner that any section of the City should be deprived of what is not only acknowledged but urged to be a very essential service. Certainly in those sections of the City which are not served by the street cars there should be no interference with the jitney or motor bus service. It is very generally recognized throughout the cities of America that the legitimate and reasonable function of jitney or motor bus vehicles is to act as a supplementary service to the regular street railway lines, whether owned and operated by the City itself or by a private corporation. Moreover, in order to render such supplementary services as stable as possible, it is very generally urged that they should be related in some co-operative and responsible manner to the permanent civic or company lines, so that the citizens in locating their homes, whether by rental or purchase, in localities dependent on these secondary services, should not be entirely at the mercy of individual caprice or temporary self-interest in taking up or dropping a service in which the operator has so little at stake.

Inasmuch as the street cars cannot vary from routes once established, while the jitneys may freely

do so, in recognizing the right of the jitneys to serve sections not tributary to the street car lines it will be necessary to prescribe definitely the routes to be followed by the jitneys, in order that the citizens may know exactly where their services are available, as also to prevent their advancing the claim of serving some special section not tributary to the street cars, largely to exploit certain street car routes on the way to and from this outlying section.

Referring to the special routes at present followed, it is obvious that the Oak Bay, Willows, Hillside and Cloverdale routes, being entirely parallel to the street car lines and serving no new territory, shall be eliminated. The Fairfield district route, which is admittedly irregular in its outlying regions, in its normal operation runs for the greater part of the route on the same streets as the cars, namely, on Fort, Cook and May Streets, while for most of the rest of the route it follows within one or two blocks of the street car. This, therefore, is practically a direct competitor with the Foul Bay street car line.

The Fernwood Road and Haultain Street jitney route only to a partial extent follows the street car route, but from Pembroke Street to Yates it passes the terminal of the Pandora Avenue and Spring Ridge route, and on Yates Street closely parallels both the Fort Street and Pandora Avenue lines. From beyond Pembroke Street up Fernwood Road and along Haultain Street the route serves an otherwise unoccupied territory. If, therefore, the lower part of the route were changed to, say, Bay Street, along to Quadra and into the city on that street, it would be a real

addition to the passenger service. Another jitney route is that along Government Street and out the Gorge Road. So far as it serves the Gorge Road district it serves new territory; otherwise it cuts into the short-haul service of the Company on one of its most lucrative routes. The jitneys should therefore operate on the Gorge Road only, or, coming down Douglas Street one block, pass along Bay to Quadra and in by that route.

We now come to the most important route served by the jitneys and the motor busses, namely, the Quadra Street route, which not only passes through an important section of the City, very imperfectly served by the street cars, but connects the City with an important suburban area of indefinite possible extension. As indicated by Mayor Todd, the B. C. Electric Company neglected a favorable opportunity in not extending its service along this route instead of to the Uplands, a region which might for some time have been served by motor busses. As it is, the much more important Quadra Street district has been compelled to depend upon the inferior service.

By starting from the corner of Yates and Douglas Streets, passing up Yates to Quadra and thence out Quadra indefinitely, this route has the advantage not only of affording independent access to the City without substantially interfering with the street car service, but it provides, as already indicated, the quite permissible connection along Bay Street with the Haultain Street route and possibly the Gorge Street route, with other possible extensions by jitney or motor bus out Oak Street or Cedar Hill Road.

With the elimination of the duplicate jitney service on the streets and in the districts served by the street cars and the free operation of the jitneys or motor busses on the Quadra route connecting with the otherwise unserved outlying districts tributary to it, it would be possible

for the street car company to maintain itself, for the present at least, on a quite unprofitable basis, it is true, but without actual loss, until the return of more favorable economic conditions. On this basis also the charter of the Company could be amended in order to put it on the same basis as the more reasonable charters in Vancouver and adjoining municipalities.

Should, however, the declarations of the Mayor and City Solicitor be taken to mean that no restriction on the jitneys as to routes and regions where they would not compete with the Company should be considered, then in spite of the experience of the Company as to its losses under present conditions, it may be assumed that were the property in the hands of the City not only should the jitneys be allowed freely to compete with the street cars on such sections of the route as they found to be most profitable, but at the same time the present high rates paid to the employees should be continued, or, in the opinion of the Mayor at least, materially increased, and the frequency of the service on several of the least profitable lines increased, and possibly the fares reduced and other improvements introduced, as suggested in his memorandum of grievances with reference to the street cars. Should the majority of the citizens be convinced that the views expressed by the Mayor are sound and practical, then the only fair and reasonable alternative to the programme of readjustment as given above would be for the City and Company to resume the recent tentative negotiations with a view to the purchase by the City of Victoria of the public utilities of Vancouver Island at present owned and operated by the B. C. Electric Company. Certainly nothing is more obvious from the facts as presented than that the Company cannot continue its transportation service on the present basis, and it is useless to speak of certain

very necessary improvements in the charter of the Company without an assurance of conditions under which the Company might continue to operate, if not at a profit, at least at no material loss. That the City cannot possibly conduct the business at a profitable rate on the basis approved by the Mayor is the conviction

of the Commission, but with the citizens willing to support the programme of the Mayor, neither the street railway employees nor the jitney interests would require to be sacrificed, as in the carrying out of his plans such deficits as would arise could always be met from the City taxes.

SUMMARY AS TO TRANSPORTATION

The situation as regards the urban and suburban transportation services in the districts centering around Vancouver may be summarized as follows:

(1) The financial condition of the B. C. Electric Railway Company, as regards its street railway system, is impossible of continuance on the basis of the past three years or the immediate prospects for the future. The deficits of the street railway operation should not be chargeable to the light and power business of the Company, which must be dealt with as nearly as possible on a quite independent basis.

(2) The urban and interurban street railway business, as proved by long and wide experience, cannot be conducted upon a basis of free competition. It is a public utility and as such essentially a natural monopoly, to be conducted on well-recognized principles as a unified service, the various portions furnishing mutual support. In the case of public utilities free competition has never proved a permanent protection to public interests: quite the reverse. A public utility commission is the only practicable safeguard for the general interest.

(3) Jitney competition on a considerable scale in conjunction with a prolonged period of depression and loss of population has destroyed the normal basis on which the street railway system was built up and can alone be maintained. As a jitney service it cannot take the place of the street railway service. Any of

the possible alternatives to the street railway which would be adequate to replace its varied services, as for instance a motor bus development, would involve the reproduction of all the essential features of the British Columbia Electric Railway Company as an organized capitalist business corporation. Such a company in turn could not maintain an extended and satisfactory service in competition with the free-lance jitneys, confining themselves, as now, to the cream of the business.

(4) Either the jitneys in competition with the street cars must be eliminated and until more prosperous conditions return certain changes and economies introduced, or the electric street cars must either go out of business, or if forced to operate on a basis which will permit them to meet the competition of the jitneys, they must at least abandon the outlying and more unremunerative sections of their lines, reduce the frequency of the service on others, discontinue all transfers, and exact a five-cent minimum fare for all persons, including children under twelve years, school children, workmen, etc.

(5) As a general alternative the cities of Vancouver and Victoria, under arrangement with the adjoining municipalities, may take over the street railway systems in their respective centres and conduct them as municipal enterprises, leaving the jitneys their present freedom to take what they please of the street car revenues.

(6) If the jitney competition is

eliminated as the chief source of the annual losses of the Company, then as regards Vancouver district the remainder of the losses, due to the prevailing war conditions and the diminished population, might be fairly well met until more prosperous times recur by the fixing of a city population area within which present rates and transfers should continue, while beyond that area a readjustment with reference to rates, frequency of service, etc., could probably be effected in conference between representatives of the adjoining municipalities and the management of the Company.

(7) As regards Victoria, apart from the elimination of jitney competition in the districts served by the street cars, and the revision of the Company's charter in order to bring it into harmony with the more modern charters of the mainland, practically no change in existing fares, transfer privileges, etc., would be needed.

(8) In both districts special economies, such as the one-man cars on specified routes, to be agreed upon by the City and the Company, should be carefully considered and if possible approved.

VII. LIGHT AND POWER

PLANT CONSTRUCTION AND GROWTH OF DEMAND REVIEWED

Special conditions of unprecedented growth of Vancouver increased cost of construction. Plans for dam changed by government. Economic reaction left plants idle while cost goes on. Recommends wider use of electric current as means of bringing down price. Cost of electrical development necessarily higher at Vancouver than at Winnipeg.

THERE remains to be considered the operation of the Company as regards its electric light and power developments and their relations to the needs and requirements of the public, as also the more limited gas service in portions of Vancouver and Victoria cities.

The electric light and power interests of the Company are very large and their importance to the public is very great, while their future possibilities can scarcely be estimated. The information obtained by the Commission with reference to the whole subject of light and power was very extensive and detailed, and as in the case of the transportation matters, furnishes a very complete record of information for future reference.

Light and power are furnished to the City of Vancouver and the other districts on the mainland by the B. C. Electric Railway Company, through the Vancouver Power Company, one of its subsidiaries. The total capital

invested in this plant amounts to \$16,625,510. This is made up as follows (see Exhibit 5A):

Hydro-electric, Lake Buntzen - Coquitlam works	\$8,349,668
Steam plant, Vancouver	1,194,386
Sub-station and transmission lines	3,715,774
Light and power distribution	3,371,682

The Company also buys power from the Western Canada Power Company under a contract entered into in 1913 and running for twenty years. This contract was modified in 1917. The contract and its modifications are given in Exhibits 19 and 19A.

From Exhibit 10 we find that the gross earnings from the light and power in Vancouver district amounted in 1916 to \$1,475,723, made up from incandescent and street lighting \$1,172,492, and commercial power \$303,230. Vancouver district, for power and light pur-

poses, includes Vancouver City, Point Grey, South Vancouver, Burnaby, Port Moody, Coquitlam, Ladner and Delta. New Westminster obtains its power from the B. C. Electric at its own local sub-station and itself undertakes the sale and distribution of it. North Vancouver and the Fraser Valley up to Chilliwack are treated separately. The gross earnings from North Vancouver total \$48,287, made up from incandescent and street lighting \$21,980, and commercial power \$25,584. It will thus be seen that about fourteen-fifteenths of the gross revenue from the distribution of power and light on the mainland are derived from Vancouver and district.

In supplying Vancouver and district 79,848,302 k.w.h. were used for all purposes, including street railway. Of these 52,183,284 k.w.h. were employed for light and power, including street lighting (see Exhibit 105).

Naturally the questions of special interest for the citizens of Vancouver and district are primarily the cost of the plant, the cost and conditions of operation, the character of the service rendered, and, above all, the rates at which electric power is furnished for the various classes of service into which it is divided. In bringing out the facts bearing on these points, especially in the Vancouver district, two methods were jointly and severally followed—the method of direct inquiry as to costs and rates in Vancouver and district, and the method of comparison with other systems. As usual, the Company furnished very full statistics as to the details of the plant, conditions of operation, costs and returns. The City of Vancouver employed Mr. J. D. Ross, an electrical engineer and superintendent of the electric light and power plant of Seattle. Under the direction of Mr. McCrossan, Vancouver City Solicitor, Mr. Ross gave much valuable information as to the Seattle system, which is naturally

most commonly compared with that of Vancouver, and was the occasion of bringing out many important details from the representatives of the B. C. Electric Company in reply to his observations and comments. Much other information of a comparative nature was furnished by other parties.

COMPARE RATES WITH AVERAGE, NOT
LOWEST CITIES

As Vancouver City is naturally interested in obtaining electric power and light at the lowest possible rates, the representatives of the City made much of the fact that Winnipeg is supplied, in the matter of domestic light and power, at 3½ cents per k.w.h. and Seattle at 5½ cents, these being practically the lowest rates in Canada and the United States respectively. In taking the general experience of the continent, however, it is found that while Seattle and Los Angeles enjoy the lowest city rates in the United States for domestic lighting, the general experience of cities throughout the United States is that rates for domestic light and power are very much higher. In a table of comparative lighting rates furnishing particulars for 105 cities of the United States having a population of 50,000 and over, it is found that only the two cities of Seattle and Los Angeles have a rate as low as 5½ cents per k.w.h. after discount, the others running from that up to 12 cents (see Exhibit 141). In this list, which does not include Canadian cities, if we take the discounted rate of Vancouver at 8.8 per k.w.h., it will be found to come fifty-second on the list, or practically midway between the highest and lowest American cities. Thus in comparison with the general experience of American cities Vancouver does not fare badly, even under present conditions. In the comparisons which are made with Seattle, therefore, it must be borne in mind that Vancouver is being compared not with the average

rates of the United States, but with the lowest of their city rates.

It is not possible to go into the discussion of all the statistics furnished and comparisons made, but some of the broad features most vitally interesting to the people of Vancouver and district may be dealt with.

Probably the most important point to be considered is that the Vancouver hydro-electric Coquitlam-Buntzen plant has been developed under very special conditions, which go far to account for the position in which the Company finds itself today. When in 1902 the B. C. Electric undertook the construction of this plant, it was facing the requirements of a city and district of large promise, indeed, but of very moderate though healthy growth. The dam and tunnel as originally planned were likely to take care of the needs of the district for quite a number of years. Time would be afforded for the maturing of more extensive plans when future needs seemed to demand them. In a few years, however, the rate of progress of the district began to pass all expectations. Soon so rapid was the increase that before the necessary preparations could be made the resources of the Company were overtaken. Time at once became an all-important factor, thus necessitating the enlargement of the tunnel and the construction of a much larger dam within the briefest possible period. These extensions were undertaken in 1911. To avoid the longer time involved in the cutting of a new tunnel, the existing one was enlarged from ten to fourteen feet, while still in use. In the construction of the dam the dimensions at first considered satisfactory were greatly, and apparently unnecessarily, extended at the instance of the Dominion Government and exceptional measures were required to be taken by the Company to protect the water supply of New Westminster. All this added very largely to what was expected

to be the normal cost of the enterprise. However, the work was completed in an exceptionally permanent manner. The construction and equipment of the power houses at Lake Buntzen were also of a high grade, and the same applies to the transmission system and transforming stations. Power, however, from the new plant was not available until the autumn of 1913. In the meantime a very substantial and completely equipped steam plant was constructed as a necessary auxiliary to the hydro-electric system.

While this construction and equipment was going on the demand for light and power in Vancouver and district was increasing by leaps and bounds. Two alternatives were discussed by the management—the developing of new power plants on additional sites of their own, or the entering into a contract with the Western Canada Power Company for a large and for some years increasing block of power. The latter alternative was chosen and the contract with the Western Canada Power Company was the result. (See Exhibits 19 and 48.)

COST OF POWER GOES ON ALTHOUGH CONSUMPTION DROPS

Unfortunately for the Company, just when it was ready to take care of the expected expansion, not so much in the previous line of mere city-building as in the newer directions of extensive industrial developments, which would stabilize the somewhat top-heavy residential and retail extensions, an economic reaction set in and has been continued under war conditions. The Company has been left, therefore, with an exceptionally complete and efficient electrical establishment on its hands. It has in addition contracted to take further power which, though somewhat reduced in amount this year, is nevertheless practically unnecessary. As explained by Mr. Murrin, the larger part of

the cost of producing the power remains whether the power is used or not, and loads the price of what is actually used. This is an important point for further discussion.

Turning for a moment to the Seattle plant, we find one in much the same situation as that of the B. C. Electric Company in 1911. It is a plant in process of extensive development. On the one hand a hydro-electric plant designed to meet earlier conditions is being used to its maximum capacity, supplemented by steam power. On the other hand new developments are under way which will not only relieve the pressure on the present plant, but will provide, at comparatively small additional outlays, for the needs of a considerable number of years to come. The expenditure on this extensive undertaking, however, is not yet charged to the present output. When the system is completed, even though not fully brought into operation, the permanent capital charge and cost of maintenance and operation will at once fall upon the actual electrical energy sold and very materially alter the favorable statement as to cost of production which Mr. Ross was at present able to present. Whether the Seattle plant will be able to continue its exceptionally low domestic rates under the new conditions and in competition with a rival company is a question on which the experts most familiar with the facts appear to be seriously divided.

The point of importance, however, with reference to the Vancouver situation is that at the present time the electrical plants in the two cities are at the opposite poles as regards the cost of production of the electrical energy actually used. In the light of the facts of the past it was natural enough that the B. C. Electric Company, when met with an exceptional demand which in point of time none foresaw, should have been roundly criticized for not being more optimistic in not keeping sufficiently

ahead of the times in the expansion of its plant. Undoubtedly the very heavy capital investments and consequent time required for the adequate provision of any public utility in a large centre of population require the undertaking to be some years in advance of the actual population and industries to be served. It is equally natural that the same and other parties should, with the wisdom of hindsight, condemn the Company for having been influenced even moderately by the general clamor and proved themselves too optimistic in their plans for overtaking the demands which had outstripped them. Our sympathies may very well extend to both accusers and accused. The onus, however, of meeting the actual facts and their consequences falls chiefly upon those whose capital is at stake in the enterprise. In this respect, as already indicated, so far as the Company had actually made plans and invested its capital upon a forecast which turned out to be incorrect, it cannot expect to avoid the unfortunate consequences while practically all other bona fide investors who also miscalculated the future have had to suffer. As already indicated, however, in discussing similar conditions in Victoria, such investments as those in permanent public utilities cannot be placed in the same category as private speculations in real estate or in other purely personal and temporary ventures. The losses entailed on the B. C. Electric in, for instance, the contract with the Western Canada Power Company, while presenting no just ground for the condemnation of the Company, since the outcome was its misfortune, not its fault, yet cannot be made a basis for maintaining the rates on electric light and power at a higher rate than these could be supplied under the actual conditions of the time as prudently estimated. In determining what is a fair rate for electrical energy at any given period, the fundamental and decisive factor is

the cost of construction and equipment of a permanent plant of good quality, which will be able to meet both the present requirements and some reasonable degree of expansion for the future. It must not be too distant a future, however, for then the interest and depreciation on the investment more than counterbalance the advantage of being prepared in advance to supply all possible expansion of the district.

**POWER RATES FAIR AND REASONABLE
—LIGHT RATES HIGH**

Assuming that this is a reasonable basis on which to judge of the economic value of a public utility service we have next to consider the actual adjustment of rates as a fair charge for standard electrical services. Judged alike from the point of view of their application to the conditions of Vancouver district and by comparison with the rates elsewhere, it must be admitted that the rates charged by the B. C. Electric for the larger quantities of power for commercial and industrial purposes are on the whole fair and reasonable. There is wisdom also in the policy adopted of making special low rates for industries which are able to use electrical energy in large quantities, especially during a large proportion of the day, or, best of all, during the night or other off-peak periods. These rates, whether according to regular schedule or on special contract, compare quite favorably with those of Seattle and other favored centres. (See Exhibits 131, 142 and 143.) This is an important fact, because it lies at the foundation of the future industrial development not only of Vancouver district, but of the whole Fraser Valley, as well as the Island of Vancouver.

As to street lighting, the rates are certainly exceptionally low, especially in comparison with what may be considered a reasonable rate of lighting for other purposes.

When we come to domestic light

and power, however, we find that apart from the special cooking and heating rates the charges are high, especially for a hydro-electric plant. Moreover, it would appear that the higher rates act considerably as a discouragement to the use of light and power where they are taken through the same meter, as must be the case in the great majority of households. In Exhibit 142 Mr. Murrin gives an interesting table showing the number of private residence consumers of electric light and power whose accounts were not sufficient to meet the monthly expenses of the Company in serving them. In July, 1916, the number using not more than 12 k.w.h. for the month were 10,773, while in December the numbers were 4,347. On the other hand, the numbers of those who used over 12 k.w.h. were, in July 5,679 and in December 13,472. Thus, for the month of July nearly two-thirds of the accounts of the residential consumers did not meet the expenses of the Company in serving them, and even in December one-quarter of the consumers were in the same position. Two conclusions inevitably result from such a situation: First, that the Company should follow the sound practice of the majority of electric light corporations, municipal as well as private, and make a minimum monthly charge of not less than 50 cents, which would meet approximately 50 per cent. of the cost of maintaining the service. On the other hand, by lowering the rates for domestic light and power there would be a very direct incentive to use the current more freely and more regularly. This applies not only to the large number who are unprofitable consumers, but to those who take a larger portion and might easily be encouraged or induced to employ electricity more freely, not perhaps so much in the line of light as in the greater use of the rapidly extending comforts and conveniences which are now placed at the disposal of the

commuoity and which furnish a very considerable substitute for the power and heat derived from coal.

This phase of the problem is the more important inasmuch as the quantity of electrical energy available under the present equipment of the Company's plant is very great and every reasonable effort and policy should be prosecuted to extend the use of electrical power, the advantages of which are as yet only very partially appreciated by the general public.

No more striking example of what may be accomplished in the way of rapidly extending the use of electrical power, both as to the quantity employed and the range of its uses, is furnished than by the City of Winnipeg. Because of the unique position of Winnipeg in the matter of electric light and power rates, the Commissioner spent a few days there in looking up the history and present condition of that utility.

Before 1907 the City of Winnipeg was supplied with electric light and power by the Winnipeg Electric Railway Company. Electricity was then generated by a steam plant and supplied for domestic consumption at the rate of 20 cents per k.w.h. Needless to say, the consumption was very limited. In 1903 the Electric Railway Company, which occupied the same position with reference to the public utilities of Winnipeg as the B. C. Electric does to the public utilities of the coast cities, began the construction of a hydro-electric power plant at Pinawa, near Lac du Bonnet, on the Winnipeg River. In 1907 this was completed at a cost of something over \$3,000,000 and immediately came into operation. Domestic rates were then reduced to 10 cents per k.w.h. While the Company's plant was under construction, in the absence of a public utilities commission, various negotiations between the City and the Winnipeg Electric Railway Company for better terms broke down, as also proposals

from other quarters. The outcome was the decision of the citizens to carry out the tentative plans which had already been matured for a civic plant. This was undertaken at Point du Bois, also on the Winnipeg River. It is one of the few plants successfully carried through on the basis of the original estimates, though certain extensions and improvements were afterwards added. The original plant was completed in 1911 and electric power was first supplied in October of that year. The total expenditure on the plant to 1913, including the hydro-electric installation and the systems of transmission and distribution, amounted to \$5,759,169. The plant was designed for a normal generating capacity of 60,000 h.p., assuming 60 per cent. load factor. There is, however, available on peak load 100,000 h.p. The capital cost works out at \$253 per k.w. distributed.

WINNIPEG ALDERMEN HELD TO LOW RATE PROMISES

As correctly pointed out by Mr. Murrin, it was expected at first to meet domestic requirements at not lower than 7 cents per k.w.h., to be gradually reduced as experience justified. Certain aldermanic candidates, however, with a rashness unknown to such persons when transformed to actual aldermen, having promised the public 3-cent electricity, were clamorously held to their promises. The expected commercial demands for power not developing, and there being much power running to waste, it appeared that the losses might as well be faced over the head of low rates as over the head of insufficient use of power. Accordingly a 3½-cent rate, with a discount bringing it to 3 cents net, was granted. At the same time a reduction of one-third was made in power rates. Even then, however, only some 13,565 citizens took advantage of this very exceptional rate during the first year of operation. In desperation the civic

authorities took a leaf out of the book of the more enterprising private corporations and started a vigorous advertising campaign to induce the citizens to use their own power, made available at bargain-counter rates by their own taxes and in response to their own clamorous demands. The result was that in about three months the number of consumers had increased some fifty per cent., and since that time, notwithstanding war conditions, not only have the numbers of consumers been greatly increased, but the amount of electrical energy taken by individual consumers has been very materially increased. The use of electricity for cooking and heating has particularly expanded, owing to the exceptionally low rate of 1 cent per k.w.h. There are now in use over 35,000 meters.

The net result of the Winnipeg experiment is that through low rates and active canvassing, which chiefly consists in explaining to consumers, whether actual or prospective, the many advantages to be obtained from a more extensive use of electricity, the heavy deficits which were at first faced are now converted into a small but respectable surplus, which bids fair to increase steadily. In other words, Winnipeg was apparently, for some years at least, faced with two alternative forms of loss on its electrical plant, either a loss from its unused power which would swamp any gain on the portion sold at a good profit, or a loss on a smaller quantity of unused power which would still swamp the small gains on a larger quantity of used power at very low rates. Circumstances, and not a conviction of sound policy, forced the City to adopt the latter alternative. Even then the expected losses were likely to have continued, but the active educational publicity campaign which, once well started, aided in its own extension, rapidly converted loss into a profit.

In Winnipeg as elsewhere a minimum monthly charge is exacted, the

amounts being 30 cents for light and \$1 for power. The management has also adopted and strongly advocates a system of customers' deposits. The amount is \$3, and on this interest at 6 per cent. is allowed. Out of the 35,000 meters in use during the past year there were 18,000 removals.

While conditions in Vancouver and Victoria are admittedly not the same as those in Winnipeg, and the costs of electrical development at Coquitlam-Buntzen have been necessarily higher owing to greater physical difficulties and for other reasons already indicated, yet the Winnipeg experience places in a striking light the fundamental feature in much other experience in these and similar lines elsewhere. Where the supply of a commodity or a service is available in considerably greater quantity than called for, or where it can be increased at slight additional cost, the lowering of the rate to secure an increased market is sound economic policy and the surest guarantee against a competition which would be unfortunate for all parties.

It would, of course, require very much stronger assurance of a proportionately greater market for electrical energy to justify considerably lowering rates where it was developed from a steam plant, inasmuch as even where there is a considerable margin of capacity in the steam plant the extra output of electrical power means a corresponding expense for fuel and its handling, whereas in the case of a hydro-electric plant with a considerable available margin the extra expense for additional power is very slight.

EXTENSION OF USE OF ELECTRIC CURRENT URGED

Again, the possibilities for extending the market for electrical power are very much greater than the corresponding possibilities in the case of a street car service. Apart from the original location of one's abode or place of business, only to a very

limited extent will a reduction in car fares induce extra travel, because the normal use of cars is incidental only to one's business or other settled requirements. But in the case of electrical power every reduction in rates places within the range of the consumers new or enlarged opportunities for acceptable services which once adopted, an extension of use is natural, especially if rates continue to decrease.

In the face of the actual situation in Vancouver and district, as also in Victoria, there is every justification for an immediate lowering of the existing rates for domestic light and power. If this were followed up by an active educational canvass designed to bring home to the ordinary citizens the possibilities of electrical power in an increase of comfort and convenience and a consequent economy of time, energy, discomfort and even money in many cases, the revenues of the Company would in all probability be increased instead of diminished by the change. It is true that the response to lowered rates would be greater with the return of prosperity and the means of supporting a larger population. Hence the reduction recommended for the present is not so great as would be justified under improved conditions, the period or extent of which is just one of those matters which would normally fall to the duty of a properly constituted public utilities commission.

There is no special occasion to deal separately with conditions in Victoria and district.

Although the engineering problems to be solved at the Jordan River were of a very different character

from those at Coquitlam-Buntzen, yet the general economic conditions are much the same, on a somewhat smaller scale. The chief difficulty is not the rate of return, which is indeed very high for the amount of power consumed, inasmuch as on a gross earnings basis of \$582,463 the net earnings after deducting operating expenses, though not fixed capital charges, amount to 55 per cent. of that sum. The real difficulty is, as usual, the limited quantity sold, and there the argument applied in the case of the Vancouver situation is equally convincing. In other words, the discussion of the Vancouver situation is applicable in principle to Victoria conditions. Hence the same recommendations are made with reference to rates.

Full statistical information was presented to the Commission with reference to the operations of the British Columbia Electric Railway Company in the supply of gas to portions of the cities of Vancouver and Victoria. Particulars as to the capital employed, the rates charged for gas, the gross and net returns to the company, etc., will be found in the exhibits accompanying this report. While the present rates appear to be unduly high, yet, owing to the present and prospective difficulties of the coal situation, while the war continues it is considered inexpedient to make any proposals for the alteration of the rates at the present time. Should a public utilities commission be appointed, it would be the proper body to deal with these matters when conditions for the production of gas have become more stable after the war.

"Any of the possible alternatives to the street railway which would be adequate to replace its varied services would involve the reproduction of all the essential features of the B. C. Electric Railway Company as an organized capitalist business corporation."

VIII. PUBLIC UTILITIES COMMISSION

FORMATION OF COMMISSION NECESSARY IN PUBLIC INTEREST

Dr. Shortt declares such a body would not only protect public but would protect corporations from each other and from shortsighted and irresponsible sectional clamor which would cripple or destroy large investments with detriment to the community.

AT several points in this report reference has been made to the functions of a permanent public utilities commission as a body to which might be referred the issues which constantly arise as between the interests of the public and those of corporations which provide those permanent and costly services which are practically indispensable in modern communities. These references were necessary because, even were it possible to determine exactly what should be the proper adjustment of the civic and corporate interests on all matters in dispute at the time of a special investigation, it does not follow that the adjustment, for instance, of rates and fares, conditions and quality of service, etc., must remain constant for any considerable length of time. There are certainly fundamental economic and social conditions and principles of policy which must remain fairly constant, until at least very radical changes have been effected, but all matters incident to the constant variation of supply and demand, costs of production and margins of profit, rival sectional and individual interests and long and shortsighted views of common interests, are subject to constant variation. This is particularly true of those countries and sections of country in process of the first development of their territory and its resources. Their progress is sure to be somewhat spasmodic and unbalanced. In the earlier stages their important but more slowly matured permanent interests may be hastily sacrificed to quite temporary but very urgent requirements. This applies not only to civic matters, but

to provincial and rural conditions. Moreover, in a province such as British Columbia there is a remarkable variety not only in its physical and climatic conditions, but in its natural resources and their exceptional relations to each other. There is therefore an urgent need for the proper supervision of these resources as they affect the daily needs of the people and the maintenance of the rights of future citizens, who will naturally expect to enjoy their fair share of the common privileges of the country as a condition of their permanent settlement in it and participation in its development. To this end not only wise general laws, but efficient administration, with full information as to the conditions to be dealt with in each case, must be provided to maintain a just and fair balance between all interests where the ordinary free play of competitive business relations and contracts is insufficient to meet such far-reaching conditions, so prolonged in time, so great in magnitude, so permanent in character and so vitally affecting large bodies of citizens.

GUARDIAN OF CITIZENS AND OF PUBLIC'S SERVANTS

To act as a special guardian at once of the citizens who require the services of important public utilities and of the parties who undertake heavy risks and obligations in providing them, is the special duty of a public utilities commission. This body or commission will naturally be in close touch with the various administrative departments of the government having to do with such interests as water powers, highways and rights

of way for the local transportation lines, timber or fuel supplies, mining and fishing rights, etc. Thus, for instance, in the matter of water powers, the distribution of the benefits from these affects many individual, corporate and civic interests and several departments of the Provincial Government. Owing to the physical conditions of a mountainous country divided into more or less extensive valleys, with other highly specialized climatic conditions, all the varied industries and public utilities carried on in one of these valleys are usually to a greater or less degree dependent upon the common water supply of the central stream of every such valley, be it large or small and with or without lake expansions. The mining industries which are apt sooner or later to spring up at various points in the valley, require to utilize the water power for their development. The various agricultural interests, from live stock to fruit-growing, may depend to a very considerable extent upon the common water supply for irrigation. With an influx of population and the growth of one or more civic centres there comes the need for electric light and power, alike for town and country. Similarly local transportation, when sufficiently developed, will claim a share of the power for electric tramways. The indispensable water supply of the towns and villages, as also of the larger industries which may grow up, has likewise to be considered. The common water supply of the valley, including the various tributaries which combine to produce it, if its efficient application to all the prospective services required of it is carefully planned in advance, may be quite adequate for all ordinary requirements for an indefinite time to come. But if, without a proper regard for all the essential interests to be served, the water supply is permitted to be recklessly exploited by the first interests which appear, and which may obtain prior and more or less

exclusive rights, the results are liable to be disastrous for the subsequent and much more important interests which require to depend upon it. Thus, not only in civic centres and as regards the special matters dealt with in this report is there likely to be wasteful strife between the rival interests, but inasmuch as these may be supported or at least their difficulties occasioned by different departments of the Provincial Government, these departments are more or less involved, to the general embarrassment of the Government as well as to the detriment of the country. If, however, there is provided a single body whose function it should be to regulate the privileges and safeguard the respective rights of corporations dealing with public utilities such as sanitary water, power, light, transportation, irrigation, etc., the various public and private interests as regards public service utilities may be fully harmonized by a reference to the single test of the public interest.

IRRESPONSIBLE GROUPS MAY DESTROY INTERESTS OF PUBLIC

Nothing, however, is more dangerous and misleading than the constant attempts made to identify with the public interest the merely sectional or class interests of a small but clamorous minority. Under the cry of protecting the public interest against the encroachments of large corporations or other combinations of capital, such small and irresponsible groups would destroy some of the most permanent and essential interests of the public at large. No services, whether public or private, are perfect, but as the smaller services can be safely left to free competition, under general regulations for the public safety, the discontented are able to pass from one to another in the search for something a little less objectionable than the last.

But when of necessity a service is so large, so general, so vital to the public and involves such large

commitments of capital which cannot be readily withdrawn, it cannot be satisfactorily regulated by competition and sooner or later becomes a virtual monopoly. Then the criticism which was sharp but scattered becomes concentrated and at times clamorous. Common experience indicates that while nearly all of the criticism of large corporations, whether private or municipal, is natural, human nature being what it is, much of it is unreasonable, in the sense of being directed against the inevitable, while some of it, and occasionally a great deal of it, is both reasonable and necessary and urgently requires remedy. It is then the primary function of a public utilities commission, by a constant accumulation and intelligent study of the facts, to determine what is and what is not reasonable and justifiable criticism of the public utility services rendered by private corporations, and on the basis of this knowledge to require the maintenance of a fair and equitable standard of efficiency, such as it is possible and reasonable to afford, and to regulate the rates at which such services can be maintained. In doing so, such a commission will find it necessary not only to protect the public against the unjust and unnecessary encroachments of the corporations, but, to the end that the corporations may be able in the most efficient manner to meet the requirements of the public, to protect them against each other and against shortsighted and irresponsible sectional clamor which, if allowed to determine public policy, would cripple or destroy very essential enterprises involving large investments of wealth, the impairment of which would immediately react to the detriment of the community.

The formation of a public utilities

commission is therefore recommended for the Province of British Columbia. On such a commission should be appointed certain departmental officials who are most thoroughly acquainted with the actual conditions relating, for instance, to water powers and other natural resources of the province, the utilizing of which is essential to the services rendered by the public utilities. Apart from the departmental members there should be at least one person of good judgment and wide experience who could devote his whole time to acquiring and coordinating the necessary information as to the varied interests of the public involved in the more important utilities. If properly constituted, the commission will be able to furnish well matured and just regulations and decisions alike for the general administration of the various public utilities as for the adjustment of special grievances and claims as to rates and conditions of service, in accordance with what may be most expedient in the public interest.

To such a commission could be transferred the mass of statistical and other information as to the past and present condition of the public utilities conducted by the British Columbia Electric Railway Company, produced before the present special Commission. This will furnish for future reference a body of valuable information on the ground covered, and which can be added to in other fields and kept up to date. Thus the commission will be able to afford an intelligent readjustment in the future of the rates and conditions of service which are recommended in this report, some of which will require further modifications when conditions change for the better, to the mutual advantage of the Company and the public.

IX. FINDINGS AND RECOMMENDATIONS

VANCOUVER CITY AND THE MAINLAND

1. In accordance with the resolution of the Vancouver City Council of June 10, 1917, the terms of which were accepted by the British Columbia Electric Railway Company, which resolution was embodied in the Order-in-Council appointing this Commission, and which is as follows:

"That the Honorable the Lieutenant-Governor-in-Council of the Province of British Columbia be requested to appoint a commission for the purpose of thoroughly investigating, in all its phases, the question of transportation in the City of Vancouver and surrounding districts, said commission to be empowered to employ experts and take any other steps that will enable it to decide definitely as to the possibility of the street car service being maintained in competition with the jitneys. This resolution is made on the understanding that the British Columbia Electric Railway Company and the City Council will abide by the decision arrived at by the commission and on the understanding that the company will put its cars into operation forthwith. The same schedule and fares to prevail as prevailed at the time of the strike pending the report of the commission."

It is the decision of this Commission that an efficient street car service in the City of Vancouver and between the City of Vancouver and the City of New Westminster cannot be maintained under the present condition of competition with the jitneys or public automobile service. The grounds on which this decision has been reached are fully set forth in the body of this report.

2. As the result of the information obtained during the investigation into the economic conditions and operations of the British Columbia Electric Railway Company and subsidiary companies, the following recommendations are made in accordance with the terms of the Commission:

(a) Apart from the decision as to the jitney competition, it is recommended that until the financial returns of the street railway service materially improve, as may be determined by reference to any provincial public utilities commission which may be appointed, or by mutual agreement between the municipalities

affected and the street railway company, a city population area, as nearly as may be in accordance with the plan given on the map marked "Exhibit 133," be determined, within which fares and free transfers on the existing basis shall be maintained.

(b) That free transfers on the street cars to and from this city population area and the outlying districts of the street railway lines be discontinued, and that a conference be arranged between the official representatives of the municipalities affected and the management of the street railway company with a view to the adjustment of rates and service schedules on the lines beyond the city population area, as may be necessary to the maintenance of the best possible service under the present and immediately prospective financial conditions.

(c) That, subject to the approval of the parties to the same conference, on certain specified lines, preferably those suggested in Exhibit 131, the operation of one-man cars be given a fair trial with a view to reducing unnecessary costs and maintaining a better service on these routes than might otherwise be possible.

(d) That the B. C. Electric Railway Company be authorized, in accordance with the plans proposed in Exhibit 147, to increase the speed limit and by skip stops to improve the service by special through cars between Vancouver and New Westminster.

3. It is recommended:

(a) That the rates for domestic light and power on Schedule L. A., which at present run from 11 cents to 5 cents per k.w.h. for a monthly consumption between 50 and 300 k.w.h. and subject to a 20 per cent. discount if paid within ten days, shall be reduced from January 1, 1918, to net rates of 8 cents to 4 cents, and proportionately for the intermediate rates of the schedule; that on the 1st of January, 1919, these rates shall be reduced to 7½ cents to 4 cents, and on January 1, 1920, to 7 cents to 4 cents, and the intermediate rates proportionately.

(b) That some proportionate reduction in rates shall take place in the schedule for domestic meters, applying to the districts adjoining Vancouver and which at present start with a 13-cent rate.

(c) That the meter rental of 15 cents under Schedule L. A. be discontinued and that a minimum charge of 30 cents per month be required from each consumer.

(d) That where the security deposit of \$3 is retained, interest shall be allowed on it at the rate of 6 per cent.; where the deposit is not retained a surcharge of 10 per cent. may be added to all accounts overdue for twenty days.

(e) That should the financial condition of the Company continue to improve during the next two years, a further reduc-

tion in electric light and power rates should be made on Schedule L A., as also on several of the higher rates of some of the other schedules, especially those affecting smaller consumers of power. Should, however, in the meantime a public utilities commission be appointed, this recommendation will not be required.

VICTORIA

1. It is recommended that for the reasons given in the body of the report, and in accordance with the details specified, the jitney competition with the street cars along the routes and in the districts served by them be eliminated, but that in the districts not served by the street cars the jitneys and motor husses may freely operate, and that in order to reach the centre of the city they may ply along North Quadra Street to its junction with Yates Street and down Yates Street to Douglas Street.

2. It is recommended that the charter under which the British Columbia Electric Railway Company operates in Victoria and district be amended so as to bring it into harmony with the charters granted to Vancouver and the adjoining municipalities, except as to the proportion of gross earnings to be paid to the City of Vancouver.

3. It is recommended that, since by the Provincial Act of March 10, 1910, the rates for domestic light which apply to Vancouver and to the districts adjoining are made applicable to the City of Victoria and district, the reductions which are recommended for the domestic lighting schedules of Vancouver and its district shall apply also to the schedules for Victoria and its district respectively.

"It required many years to convince the people of America that there were a number of very essential public utilities which could only be conducted as natural monopolies."

* * *

"At the present time, it is not a question as to whether the Company can pay dividends of even the most modest proportions, but whether it can maintain an equilibrium between income and fixed charges."

* * *

"It is very evident that the first condition of the B. C. Electric Railway Company, as a transportation Company, being able to comply with all the conditions, is that the Company itself shall be able to exist at all."

* * *

"Nothing is more dangerous and misleading than the constant attempts made to identify with the public interest the merely sectional or class interests of a small but clamorous minority. Under the cry of protecting the public interest against the encroachments of large corporations or other combinations of capital, such small and irresponsible groups would destroy some of the most permanent and essential interests of the public at large."

